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T. LUCRETI CARI

DE RERUM NATURA

A SELECTION FROM THE FIFTH BOOK

(1–782)

EDITED

WITH INTRODUCTION, ANALYSIS, AND NOTES

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PREFACE

THIS edition of the first half of the fifth book of Lucretius has been prepared as objections have been raised that it was unsatisfactory to read only the latter half of the book and that it was therefore advisable to complete the edition.

The object of the earlier book was to introduce the poem of Lucretius to lower forms than usual, but as the latter half is considerably easier than the earlier, I believe it would be a practicable solution to read the second part in one term and the first part in the following. This is a feasible suggestion, strange though it may seem, for the creation of the things in the world (ll. 783–1457) might easily precede, as being simpler, the more complicated account of the creation of the world and the formation of the heavenly bodies (ll. 1–782). Then, after being gradually accustomed to the style of Lucretius, the harder and more philosophical portion could be read with greater ease later.

As was the case with the earlier edition this also is based on Munro's 'magnum opus', and owes very much to Mr. Duff's admirable book, especially with regard to the astronomy, and also to the care and suggestions of the reader of the Clarendon Press. The text is practically that of the Clarendon Press.

W. D. LOWE.

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INTRODUCTION

THE LIFE OF LUCRETIUS

THE life of Lucretius, as it is usually accepted, is given here without any examination of the conflicting accounts and theories put forward by different editors.

Titus Lucretius Carus was born probably B. C. 99 and died October 15, B.C. 55. The statement that his death was due to suicide during a fit of madness caused by drugs must be regarded with suspicion: the story of the love-philtre would be suggested by the contemptuous attitude of the poet towards love in the fourth book, while the fiction of his insanity might be readily invented by the Christian writers who found his attitude towards religion so abhorrent. He was almost certainly a man of good family: his name is that of an old patrician house, and he addresses Memmius, himself of high birth, in a tone of serene equality.

Lucretius was a man of literary tastes and he showed no inclination for political life, more especially during the troublous times of the struggles between Pompey and Caesar. He was moreover an Epicurean and the Epicureans had no sympathy with politics. He lived the life of a student and busied himself with the works of the Greek authors and the old Latin writers, but above all he devoted himself to the philosophy of Epicurus; and the result of his lifework is the presentation of that philosophy in the didactic poem *De Rerum Natura* in six books, a work that is not the production of a madman, whatever defects it may contain. Moreover, as Prof. Mackail in his *Latin Literature* says: 'Many of the most important physical discoveries of modern times are hinted at or even expressly stated by Lucretius.' Indeed his theories of the atomic doctrine, of light, of evolution, and of the ultimate constitution of atoms have won the admiration of modern scientists. Yet, after all, the true greatness of Lucretius rests

rather on his philosophy of life, and this philosophy is a practical one: he spoke of the world to man for man's good, for he believed that a true knowledge of the universe and its creation would free mankind from the childish terrors of superstitious ignorance and raise them to a higher level of intelligence and to a nobler comprehension of life.

THE STYLE OF LUCRETIUS

Lucretius was, at any rate in literature, *laudator temporis acti*. He read and admired the older writers and he imitated the ancient poets: Homer and Empedocles among the Greeks, Ennius and the older tragedians among the Latin poets, were studied diligently by him and naturally had considerable influence on his language and turn of expression. He is fond of using old and half-forgotten forms of words: he uses and invents many compound adjectives of the Greek type, such as *vulgivagus*, *levisomnus*, *anguimanus*, *pennipotens*, *bucerus*, and the like: instances of ἅπαξ λεγόμενα are frequent. Alliteration and assonance, a characteristic feature in the early literature of any nation, play a prominent part, especially where the poet wishes to drive a point home.

The Lucretian hexameter is distinctly in advance of that of Ennius, yet it is closer to the rugged verse of the older poet than to the smoothness and elaborate finish of the Vergilian line. He is ready to use spondaic endings, he uses monosyllables, quadrisyllables, and polysyllables to close a line, he seems almost to prefer archaic terminations of substantives and verbs: he makes free use of tmesis, inverted tmesis (*ordia prima* for *primordia*, iv. 32; *facit are* for *arefacit*, vi. 962), and elision: he frequently marks off the first two feet from the rest of the line, interrupting the rhythm by a sudden jerk. One of the especial features in the verse of Lucretius is his method of dealing with the fourth foot, which is frequently contained in a single word and ends with it, while Vergil prefers to have a caesura. For instance Vergil writes 'arma virumque cano Troiae qui primus ab oris', inverting the natural order of *Troiae*

qui: Lucretius, on the other hand, would be almost certain to retain the natural order *qui Troiae*, and would be content to dispense with the caesura which Vergil prefers to have. So in our book Lucretius writes 'sine puro pectore vivi, quod tangi non licet ipsum, cum pulchre degeret aevum', where in all probability Vergil would have written 'puro sine pectore..., tangi quod non . . ., pulchre cum degeret . . .' Sometimes his muse creeps and he indulges in unpoetical phrases, *quod superest*, *huc accedit*, *fateare necessest*, and other logical formulae more suited to a philosophical treatise in prose.

A strange peculiarity in Lucretius should also be noticed: time and again we shall observe as we read this selection that he gives several reasons, several causes, several explanations, for one phenomenon of nature, as for example when he wishes to explain eclipses; of these explanations it not infrequently happens that only one is correct, possible, scientific, or even reasonable, yet he puts them all before the reader on an equal footing, showing little indication of his own preference. What is the reason for this peculiar behaviour? The answer is this. There is a simple precept in the Epicurean κανονική, which is an immediate deduction from the supremacy of αἴσθησις, namely, that in cases where αἴσθησις gives us no direct information, all explanations which do not conflict with the evidence of the senses are to be regarded as equally probable. Further, his object is also to ensure free will, unbiased judgement on the part of the reader: at all costs he will guard against them entertaining the hypothesis of divine agency or necessary law: the student must be free to use his own individual thought (a theory very different from the absolute Necessity, ἀνάγκη, of the Stoic philosophy), and so he practically tells them that they must not suppose that similar effects must always proceed from the same causes, and therefore he gives them a choice of various hypotheses to explain the various phenomena of nature. It is not a scientific attitude, but it is very characteristic of Lucretius, who sought first and foremost in this poem to ensure for mankind freedom from religious superstition and freedom of individual thought.

The poem leaves on the reader, and still more on the hearer, an impression of great vigour and latitude of expression untrammelled by the elaboration considered necessary by the later poets. Mr. Duff in his introduction aptly quotes the words of Munro: 'It has often struck me that his genius is akin to that of Milton. He displays a wonderful depth and fervour of thought, expressed in language of singular force and beauty; an admirable faculty of clear, vigorous, and well-sustained philosophical reasoning; and a style equal in its purity and correctness to that of Terence, Caesar or Cicero, and superior to that of any writer of the Augustan age.' And Mrs. Browning in *A Vision of Poets* says:

> He denied
> Divinely the divine, and died
> Chief poet on the Tiber-side.

Another great asset possessed by Lucretius is the imaginative insight and exuberant originality with which he pictures to himself and unfolds to his readers the long periods of the early struggles of primitive man in the dim recesses of the past, until gradually, by the processes of evolution, they reached that development of civilization which culminated in the civilization of the poet's own day ('ad summum donec venere cacumen').

Mommsen closes his sketch of Lucretius with this tribute: 'The didactic poem concerning the Nature of Things, however much in it may challenge censure, has remained one of the most brilliant stars in the poorly illuminated expanse of Roman literature.'

THE PHILOSOPHY OF EPICURUS

Epicurus was an Athenian citizen: he was born in Samos and lived in the fourth century B.C. (341–270 B.C.). He founded his school in Athens about 306 B.C. in the so-called 'Garden', οἱ κῆποι, where he instructed men and women in his doctrines.

In Epicureanism there is a protest in behalf of the rights of

human nature and the freedom of individual thought against the oppression of superstitious religion. Mere knowledge on the other hand he contended was in itself of no value or interest.

Epicurus based his philosophy on the axiom that experience alone was the foundation-stone of certainty: experience is to be gained from the impressions of the senses: therefore sensation is the standard of truth. If an error is made, it lies not in the sensation, but in our interpretation of the sensation, in the inferences we draw from it. Repeated sensations produce a permanent image, a preconception (*notities* or *anticipatio*, πρόληψις) in the mind.

In Physics, the reason for studying this science, the study of Nature, was to free mankind from the trammels of religion and superstition, by proving the creation of the universe to be due to mechanical causes. He denied divine agency in the creation of the world, maintaining that it was the result of the fortuitous collision and combinations of immutable and irreducible atoms, and that the meeting of these atoms was rendered possible by their own perpetual downward and oblique motion and by the existence of void (*inane*, *vacuum*, τὸ κενόν). He held that numberless worlds were continually coming into existence and passing away again. The soul itself, partly irrational life (*anima*, ψυχή), partly rational power (*animus*, λόγος), he believed to be composed of the lightest and finest atoms, of the same nature therefore as the body, though more agile owing to the excessive lightness of its composition; yet it will perish with the body, its ethereal atoms will pass away into the purer ether, as the coarser atoms of the body will pass back into the all-mother earth: consequently it will have no future existence, for it has no divine element any more than the material and tangible world. And if there is no after-existence, then we can throw off the base fear of death which precludes happiness in this life and oppresses men's hearts with superstitious dread of the gods.

The gods, they are immortal, they live in perfect bliss in the upper ether (*intermundia*, μετακόσμια): why should they throw aside their leisured happiness to create a world for men? it

could only cause them anxiety: their bliss being perfect and divine could not be increased. Besides the very imperfections of the world disprove divine agency. The creation of the world is due to chance or nature, practically synonymous terms in the Epicurean philosophy.

In Ethics Epicurus agreed with Aristippus in making pleasure the sole natural end of life, the standard of good, as sensation is of truth: pain is the sole evil: pleasure is the absence of pain. On the other hand mental pleasures which give permanent tranquillity are to be preferred to bodily pleasures which provide merely momentary gratification. To ensure freedom from pain he taught the value of plain living, seeing in virtue not the end of life, but rather the means to the end of life, which offered to him a state of temperate equilibrium and pleasant tranquillity, both mental and physical (ἀταραξία). The wise man, that is the virtuous man, is happy and has this mental and physical ἀταραξία because he is free from the fear of the gods and of death, he can control his passions and desires, and can distinguish accurately between pleasures and pains, and thereby ensure securing the greatest possible amount of the former with the least possible of the latter.

So in Ethics, no less than in Physics, we see that all idea of higher and more spiritual life is absent: in both the divine element is lacking.

Professor Mayor sums up Epicureanism in a concise and telling phrase. 'I am inclined to think Cicero was not very wide of the mark when he spoke of it as a "bourgeois philosophy" (Cic. *Tusc.* i. 55 *plebeii philosophi*).' It did not care for science, it did not value truth for its own sake, it did not stir the soul to action and it did not foster a self-sacrificing spirit. But it is easier to see these defects through the clearing-glasses of time than for contemporaries to detect them, and what was a philosophy to the master became a religion to the disciple, and Lucretius in his enthusiastic admiration for Epicurus preached the gospel of Epicureanism more fervently than its founder, exclaiming with conviction and veneration from the depths of his heart 'deus ille fuit, deus' (bk. v. 8).

THE POEM 'DE RERUM NATURA'

The title of the poem is a Latin translation of the title of a similar didactic Epic by Empedocles called περὶ φύσεως written in the fifth century B.C.

Lucretius wished to expound the doctrines of Epicurus not merely from a desire to put before his readers the theory of his physical system, but chiefly from a deeply rooted wish to free mankind from the terrors of death which are caused by the belief in a future life: he therefore determined to explain the true nature of things.

Books one and two describe fully the physical theories of Democritus and Epicurus, dwelling on the nature of atoms and void, which form the chief component factors of the universe. In these two books he mentions only to refute them the systems of other philosophers. Book three shows that the soul is itself a material part of man and perishes when the body dies. The next book deals with the Epicurean theory of the senses. The fifth book falls into two parts, describing first the creation of the world, second the evolution of man and the beginnings of society. In the last book Lucretius puts before us a miscellany of natural phenomena and curiosities in nature, which he certainly intended to rearrange and systematize before it was actually published, though he was in all probability prevented from doing this by his untimely death.

THE SUBJECT-MATTER OF THE FIFTH BOOK

This book, which contains some of the very finest work of Lucretius, forms two great epics, the creation of the world, and the creation and development of man.

The book opens with a panegyric on Epicurus. The poet then promises a sketch of the creation of the world and of the heavenly bodies and their movements, in order that men may realize the mortal nature of the world and not be enslaved to the terrors of superstition by the belief that it was designed

and created by the gods. The gods were in reality totally indifferent to the affairs of mankind: indeed there was no inducement for them to exchange their leisured bliss for the anxiety of world-building: surely too, if the gods had made the world, it would have been both more perfect and happier. Rather Nature is the great creative principle. The world and all that is in it is mortal: water, air, fire, stones, ether itself, all gradually decay and die away. Earth too had its beginning and must have its end.

He then proceeds to describe the formation of the world out of indestructible atoms which collided and combined: the heavier particles forming the earth, the lighter ones composing the ether and the heavenly bodies, the result being that the earth sank and the ether rose. Next he endeavours to describe and account for the motions and courses of the heavenly bodies and to explain the nature of the sun, which he with the Epicureans maintained was really of the size that it appeared to them. After this follows a description of the recurrence of days and nights, of the succession of the seasons, and an explanation of the causes of eclipses.

At this point our selection ends, but he continues in fulfilment of his promise with the story of the creation of herbage, animals, birds, and lastly man produced from earth, the all-mother. He denies the possibility of beings of twofold nature, such as Centaurs, Satyrs, Scylla, and the like. Then follows an account of the earliest life of primitive man, the beginnings of social intercourse, the discovery of fire, and the development of civilization. And now Lucretius launches out into a bitter indictment of religion and describes its evil effects upon man. Next he tells of the discovery of the use of metals, the consequent development of war and its instruments, the cultivation of the soil, the beginnings of music, and the recognition of the recurrence of seasons. Naturally resulting from these arts come the closer life and communion of man with man, the discovery of letters, the beginnings of history, and the progress of the arts and luxuries of life gradually leading up to the elaborate civilization of the poet's own day.

DE RERVM NATVRA
LIBER V

No one can adequately praise my master Epicurus, who is the founder of the only philosophy worthy of the name, inasmuch as he bestowed far greater benefits on mankind than did the so-called gods Bacchus and Ceres and Hercules. Their benefits were merely temporal, his are spiritual, for by guiding our minds towards right reason he freed us from superstition and evil passions. Surely then he is far more worthy than they to be reverenced as a god.

Qvis potis est dignum pollenti pectore carmen
condere pro rerum maiestate hisque repertis?
quisve valet verbis tantum qui fingere laudes
pro meritis eius possit qui talia nobis
pectore parta suo quaesitaque praemia liquit?
nemo, ut opinor, erit mortali corpore cretus.
nam si, ut ipsa petit maiestas cognita rerum,
dicendum est, deus ille fuit, deus, inclute Memmi,
qui princeps vitae rationem invenit eam quae
nunc appellatur sapientia, quique per artem
fluctibus e tantis vitam tantisque tenebris
in tam tranquillo et tam clara luce locavit.
confer enim divina aliorum antiqua reperta.
namque Ceres fertur fruges Liberque liquoris
vitigeni laticem mortalibus instituisse;
cum tamen his posset sine rebus vita manere,
ut fama est aliquas etiam nunc vivere gentis.
at bene non poterat sine puro pectore vivi;
quo magis hic merito nobis deus esse videtur,
ex quo nunc etiam per magnas didita gentis
dulcia permulcent animos solacia vitae.

Herculis antistare autem si facta putabis,
longius a vera multo ratione ferere.
quid Nemeaeus enim nobis nunc magnus hiatus
ille leonis obesset et horrens Arcadius sus?
denique quid Cretae taurus Lernaeaque pestis
hydra venenatis posset vallata colubris?
quidve tripectora tergemini vis Geryonai,
quid volucres pennis aeratis invia stagna
tanto opere officerent nobis Stymphala colentes,
et Diomedis equi spirantes naribus ignem
Thraces Bistoniasque plagas atque Ismara propter?
aureaque Hesperidum servans fulgentia mala,
asper, acerba tuens, immani corpore serpens
arboris amplexus stirpem quid denique obesset
propter Atlanteum litus pelagique severa,
quo neque noster adit quisquam nec barbarus audet?
cetera de genere hoc quae sunt portenta perempta,
si non victa forent, quid tandem viva nocerent?
nil, ut opinor: ita ad satiatem terra ferarum
nunc etiam scatit et trepido terrore repleta est
per nemora ac montis magnos silvasque profundas;
quae loca vitandi plerumque est nostra potestas.
at nisi purgatumst pectus, quae proelia nobis
atque pericula tumst ingratis insinuandum?
quantae tum scindunt hominem cuppedinis acres
sollicitum curae quantique perinde timores?
quidve superbia spurcitia ac petulantia? quantas
efficiunt clades? quid luxus desidiaeque?
haec igitur qui cuncta subegerit ex animoque
expulerit dictis, non armis, nonne decebit
hunc hominem numero divum dignarier esse?
cum bene praesertim multa ac divinitus ipsis
immortalibu' de divis dare dicta suerit
atque omnem rerum naturam pandere dictis.

Following in the footsteps of Epicurus, I will now explain the inexorable laws of nature and the universe. I have proved the soul to be mortal, and I will now prove that the world itself must also be mortal. I will describe the creation of the world out of chaos, the creation of man and creatures, the growth of superstition and especially the movements of the heavenly bodies which are not, as men fancy, controlled by the gods, and by doing this I will free men from their unfounded superstitions.

Cuius ego ingressus vestigia dum rationes
persequor ac doceo dictis, quo quaeque creata
foedere sint, in eo quam sit durare necessum
nec validas valeant aevi rescindere leges,
quo genere in primis animi natura reperta est
nativo primum consistere corpore creta
nec posse incolumis magnum durare per aevum,
sed simulacra solere in somnis fallere mentem,
cernere cum videamur eum quem vita reliquit,
quod superest, nunc huc rationis detulit ordo,
ut mihi mortali consistere corpore mundum
nativumque simul ratio reddunda sit esse;
et quibus ille modis congressus materiai
fundarit terram caelum mare sidera solem
lunaique globum; tum quae tellure animantes
exstiterint, et quae nullo sint tempore natae;
quove modo genus humanum variante loquela
coeperit inter se vesci per nomina rerum;
et quibus ille modis divum metus insinuarit
pectora, terrarum qui in orbi sancta tuetur
fana lacus lucos aras simulacraque divum.
praeterea solis cursus lunaeque meatus
expediam qua vi flectat natura gubernans;
ne forte haec inter caelum terramque reamur
libera sponte sua cursus lustrare perennis
morigera ad fruges augendas atque animantis,
neve aliqua divum volvi ratione putemus.
nam bene qui didicere deos securum agere aevum,
si tamen interea mirantur qua ratione

quaeque geri possint, praesertim rebus in illis
quae supera caput aetheriis cernuntur in oris,
rursus in antiquas referuntur religiones
et dominos acris adsciscunt, omnia posse
quos miseri credunt, ignari quid queat esse,
quid nequeat, finita potestas denique cuique
quanam sit ratione atque alte terminus haerens.

First, as the world has had a beginning (i. e. its creation), it must therefore be mortal and so will some day come to an end. Earthquakes go to prove it. May the end only not come in our day!

Quod superest, ne te in promissis plura moremur,
principio maria ac terras caelumque tuere;
quorum naturam triplicem, tria corpora, Memmi,
tris species tam dissimilis, tria talia texta,
una dies dabit exitio, multosque per annos
sustentata ruet moles et machina mundi.
nec me animi fallit quam res nova miraque menti
accidat exitium caeli terraeque futurum,
et quam difficile id mihi sit pervincere dictis;
ut fit ubi insolitam rem apportes auribus ante
nec tamen hanc possis oculorum subdere visu
nec iacere indu manus, via qua munita fidei
proxima fert humanum in pectus templaque mentis.
sed tamen effabor. dictis dabit ipsa fidem res
forsitan et graviter terrarum motibus ortis
omnia conquassari in parvo tempore cernes.
quod procul a nobis flectat fortuna gubernans,
et ratio potius quam res persuadeat ipsa
succidere horrisono posse omnia victa fragore.

The world is not immortal: it is lifeless and inanimate and therefore cannot be divine, it must come to an end. The soul and mind cannot exist away from the body, much more therefore must the inanimate world be mortal and not divine.

Qua prius aggrediar quam de re fundere fata
sanctius et multo certa ratione magis quam

Pythia quae tripode a Phoebi lauroque profatur,
multa tibi expediam doctis solacia dictis;
religione refrenatus ne forte rearis
terras et solem et caelum, mare sidera lunam,
corpore divino debere aeterna manere,
proptereaque putes ritu par esse Gigantum
pendere eos poenas immani pro scelere omnis
qui ratione sua disturbent moenia mundi
praeclarumque velint caeli restinguere solem
immortalia mortali sermone notantes;
quae procul usque adeo divino a numine distant,
inque deum numero quae sint indigna videntur,
notitiam potius praebere ut posse putentur
quid sit vitali motu sensuque remotum.
quippe etenim non est, cum quovis corpore ut esse
posse animi natura putetur consiliumque;
sicut in aethere non arbor, non aequore salso
nubes esse queunt neque pisces vivere in arvis
nec cruor in lignis neque saxis sucus inesse.
certum ac dispositumst ubi quicquid crescat et insit.
sic animi natura nequit sine corpore oriri
sola neque a nervis et sanguine longius esse.
quod si posset enim, multo prius ipsa animi vis
in capite aut umeris aut imis calcibus esse
posset et innasci quavis in parte soleret,
tandem in eodem homine atque in eodem vase manere.
quod quoniam nostro quoque constat corpore certum
dispositumque videtur ubi esse et crescere possit
sorsum anima atque animus, tanto magis infitiandum
totum posse extra corpus formamque animalem
putribus in glebis terrarum aut solis in igni
aut in aqua durare aut altis aetheris oris.
haud igitur constant divino praedita sensu,
quandoquidem nequeunt vitaliter esse animata.

The gods have nothing to do with us: they are of such fine atoms that mortal senses cannot perceive them: and similarly we cannot perceive their dwelling-places built of very fine atoms. They did not create the world for us, why should they? They did not create man, how could they? They had no conception of man until nature and natural causes (the union of atoms) showed them the way. Besides the gods were absolutely happy as they were, and the creation of man could not increase their happiness. After numberless attempts and numberless failures the concourse of atoms gradually formed the world.

Illud item non est ut possis credere, sedis
esse deum sanctas in mundi partibus ullis.
tenvis enim natura deum longeque remota
sensibus ab nostris animi vix mente videtur;
quae quoniam manuum tactum suffugit et ictum,
tactile nil nobis quod sit contingere debet.
tangere enim non quit quod tangi non licet ipsum.
quare etiam sedes quoque nostris sedibus esse
dissimiles debent, tenues de corpore eorum;
quae tibi posterius largo sermone probabo.
dicere porro hominum causa voluisse parare
praeclaram mundi naturam proptereaque
allaudabile opus divum laudare decere
aeternumque putare atque immortale futurum
nec fas esse, deum quod sit ratione vetusta
gentibus humanis fundatum perpetuo aevo,
sollicitare suis ulla vi ex sedibus umquam
nec verbis vexare et ab imo evertere summa,
cetera de genere hoc adfingere et addere, Memmi,
desiperest. quid enim immortalibus atque beatis
gratia nostra queat largirier emolumenti,
ut nostra quicquam causa gerere aggrediantur?
quidve novi potuit tanto post ante quietos
inlicere ut cuperent vitam mutare priorem?
nam gaudere novis rebus debere videtur
cui veteres obsunt; sed cui nil accidit aegri
tempore in anteacto, cum pulchre degeret aevum,

quid potuit novitatis amorem accendere tali?
at, credo, in tenebris vita ac maerore iacebat,
donec diluxit rerum genitalis origo.
quidve mali fuerat nobis non esse creatis?
natus enim debet quicumque est velle manere
in vita, donec retinebit blanda voluptas.
qui numquam vero vitae gustavit amorem
nec fuit in numero, quid obest non esse creatum?
exemplum porro gignundis rebus et ipsa
notities divis hominum unde est insita primum,
quid vellent facere ut scirent animoque viderent,
quove modost umquam vis cognita principiorum
quidque inter sese permutato ordine possent,
si non ipsa dedit specimen natura creandi?
namque ita multa modis multis primordia rerum
ex infinito iam tempore percita plagis
ponderibusque suis consuerunt concita ferri
omnimodisque coire atque omnia pertemptare,
quaecumque inter se possent congressa creare,
ut non sit mirum si in talis disposituras
deciderunt quoque et in talis venere meatus,
qualibus haec rerum geritur nunc summa novando.

Again the very imperfections of the world prove that its creation must be the result of natural causes and not of divine agency. Only a portion is habitable and fit to be cultivated, and that at the cost of great labour which the bad seasons often render useless. Consider too all the miseries of life and the dangers to which we are exposed. Are they of divine creation, are they the work of beneficent gods?

Quod ⟨si⟩ iam rerum ignorem primordia quae sint,
hoc tamen ex ipsis caeli rationibus ausim
confirmare aliisque ex rebus reddere multis,
nequaquam nobis divinitus esse paratam
naturam rerum: tanta stat praedita culpa.
principio quantum caeli tegit impetus ingens,

inde avide partem montes silvaeque ferarum
possedere, tenent rupes vastaeque paludes
et mare quod late terrarum distinet oras.
inde duas porro prope partis fervidus ardor
assiduusque geli casus mortalibus aufert.
quod superest arvi, tamen id natura sua vi
sentibus obducat, ni vis humana resistat
vitai causa valido consueta bidenti
ingemere et terram pressis proscindere aratris.
si non fecundas vertentes vomere glebas
terraique solum subigentes cimus ad ortus,
sponte sua nequeant liquidas exsistere in auras,
et tamen interdum magno quaesita labore
cum iam per terras frondent atque omnia florent,
aut nimiis torret fervoribus aetherius sol
aut subiti perimunt imbres gelidaeque pruinae,
flabraque ventorum violento turbine vexant.
praeterea genus horriferum natura ferarum
humanae genti infestum terraque marique
cur alit atque auget? cur anni tempora morbos
apportant? quare mors immatura vagatur?
tum porro puer, ut saevis proiectus ab undis
navita, nudus humi iacet, infans, indigus omni
vitali auxilio, cum primum in luminis oras
nixibus ex alvo matris natura profudit,
vagituque locum lugubri complet, ut aequumst
cui tantum in vita restet transire malorum.
at variae crescunt pecudes armenta feraeque
nec crepitacillis opus est nec cuiquam adhibendast
almae nutricis blanda atque infracta loquela
nec varias quaerunt vestis pro tempore caeli,
denique non armis opus est, non moenibus altis,
quis sua tutentur, quando omnibus omnia large
tellus ipsa parit naturaque daedala rerum.

As parts of the world (earth, air, fire, water) are mortal, the whole world must be mortal. That which has a beginning must have an end. The world is doomed to destruction at some future time.

Principio quoniam terrai corpus et umor
aurarumque leves animae calidique vapores,
e quibus haec rerum consistere summa videtur,
omnia nativo ac mortali corpore constant,
debet eodem omnis mundi natura putari.
quippe etenim quorum partis et membra videmus
corpore nativo ac mortalibus esse figuris,
haec eadem ferme mortalia cernimus esse
et nativa simul. quapropter maxima mundi
cum videam membra ac partis consumpta regigni,
scire licet caeli quoque item terraeque fuisse
principiale aliquod tempus clademque futuram.

The earth and the elements are mortal: it is destroyed by wind and by floods, but it is in turn replenished: earth the mother of all things is the tomb of all things, and again in turn reproduces all things.

Illud in his rebus ne corripuisse rearis
me mihi, quod terram atque ignem mortalia sumpsi
esse neque umorem dubitavi aurasque perire
atque eadem gigni rursusque augescere dixi,
principio pars terrai nonnulla, perusta
solibus assiduis, multa pulsata pedum vi,
pulveris exhalat nebulam nubisque volantis
quas validi toto dispergunt aere venti.
pars etiam glebarum ad diluviem revocatur
imbribus et ripas radentia flumina rodunt.
praeterea pro parte sua, quodcumque alid auget,
redditur; et quoniam dubio procul esse videtur
omniparens eadem rerum commune sepulcrum,
ergo terra tibi libatur et aucta recrescit.

So too water appears, disappears into the sea, and reappears from wells: much also evaporates or drains into the ground, but the sum total remains constant.

Quod superest, umore novo mare flumina fontis
semper abundare et latices manare perennis
nil opus est verbis: magnus decursus aquarum
undique declarat. sed primum quicquid aquai
tollitur in summaque fit ut nil umor abundet,
partim quod validi verrentes aequora venti
diminuunt radiisque retexens aetherius sol,
partim quod subter per terras diditur omnis.
percolatur enim virus retroque remanat
materies umoris et ad caput amnibus omnis
convenit, inde super terras fluit agmine dulci
qua via secta semel liquido pede detulit undas.

And the same is true of air which is always changing. Films stream off from things and pass into air; unless the air gave back just as much as it receives, everything would have already become air.

Aera nunc igitur dicam qui corpore toto
innumerabiliter privas mutatur in horas.
semper enim, quodcumque fluit de rebus, id omne
aeris in magnum fertur mare; qui nisi contra
corpora retribuat rebus recreetque fluentis,
omnia iam resoluta forent et in aera versa.
haud igitur cessat gigni de rebus et in res
recidere, assidue quoniam fluere omnia constat.

And the same is the case with fire. The sun sends out new light continually to replace what is lost or absorbed by the clouds: just as new lamps must replace old ones on earth to maintain a constant supply of light. And the same is true of the moon and stars.

Largus item liquidi fons luminis, aetherius sol,
irrigat assidue caelum candore recenti
suppeditatque novo confestim lumine lumen.
nam primum quicquid fulgoris disperit ei,

quocumque accidit. id licet hinc cognoscere possis,
quod simul ac primum nubes succedere soli
coepere et radios inter quasi rumpere lucis,
extemplo inferior pars horum disperit omnis
terraque inumbratur qua nimbi cumque feruntur;
ut noscas splendore novo res semper egere
et primum iactum fulgoris quemque perire
nec ratione alia res posse in sole videri,
perpetuo ni suppeditet lucis caput ipsum.
quin etiam nocturna tibi, terrestria quae sunt,
lumina, pendentes lychni claraeque coruscis
fulguribus pingues multa caligine taedae
consimili properant ratione, ardore ministro,
suppeditare novum lumen, tremere ignibus instant,
instant, nec loca lux inter quasi rupta relinquit.
usque adeo properanter ab omnibus ignibus ei
exitium celeri celatur origine flammae.
sic igitur solem lunam stellasque putandumst
ex alio atque alio lucem iactare subortu
et primum quicquid flammarum perdere semper;
inviolabilia haec ne credas forte vigere.

Time destroys everything, even the very hardest objects, such as stones and metals: as they end so they must have had a beginning and cannot have always existed: for if they had existed from everlasting they would not now be perishing.

Denique non lapides quoque vinci cernis ab aevo,
non altas turris ruere et putrescere saxa,
non delubra deum simulacraque fessa fatisci,
nec sanctum numen fati protollere finis
posse neque adversus naturae foedera niti?
denique non monumenta virum dilapsa videmus,
†quaerere proporro sibi cumque senescere credas†
non ruere avulsos silices a montibus altis
nec validas aevi viris perferre patique
finiti? neque enim caderent avulsa repente,

ex infinito quae tempore pertolerassent
omnia tormenta aetatis privata fragore.

Some say the ether which surrounds everything begets things and receives them back again after destruction: ether too then changes and must therefore be mortal, as all things are which are subject to increase and decrease.

Denique iam tuere hoc, circum supraque quod omnem
continet amplexu terram: si procreat ex se
omnia, quod quidam memorant, recipitque perempta,
totum nativo ac mortali corpore constat.
nam quodcumque alias ex se res auget alitque,
deminui debet, recreari, cum recipit res.

Surely if the world had always existed from infinite time past, history would go further back. Arts and sciences are still progressing, the world then is probably young: or if there was a previous civilization which has been destroyed by some great catastrophe of nature, the world being liable to these catastrophes will some day be destroyed by one, just as mortals being liable to disease some day die of one.

Praeterea si nulla fuit genitalis origo
terrarum et caeli semperque aeterna fuere,
cur supera bellum Thebanum et funera Troiae
non alias alii quoque res cecinere poetae?
quo tot facta virum totiens cecidere neque usquam
aeternis famae monumentis insita florent?
verum, ut opinor, habet novitatem summa recensque
naturast mundi neque pridem exordia cepit.
quare etiam quaedam nunc artes expoliuntur,
nunc etiam augescunt; nunc addita navigiis sunt
multa, modo organici melicos peperere sonores.
denique natura haec rerum ratioque repertast
nuper, et hanc primus cum primis ipse repertus
nunc ego sum in patrias qui possim vertere voces.
quod si forte fuisse antehac eadem omnia credis,
sed periisse hominum torrenti saecla vapore,
aut cecidisse urbis magno vexamine mundi,

aut ex imbribus assiduis exisse rapaces
per terras amnis atque oppida coperuisse,
tanto quique magis victus fateare necessest
exitium quoque terrarum caelique futurum.
nam cum res tantis morbis tantisque periclis
temptarentur, ibi si tristior incubuisset
causa, darent late cladem magnasque ruinas.
nec ratione alia mortales esse videmur
inter nos, nisi quod morbis aegrescimus isdem
atque illi quos a vita natura removit.

Things that are immortal must either be impenetrable like atoms, intangible like void, or there must be no space beyond into which they can pass and be destroyed, as is the case with the universe itself. None of these conditions are true of the world, therefore it must perish, and if it perishes it must have had a beginning and not have existed from everlasting ages.

Praeterea quaecumque manent aeterna necessust
aut, quia sunt solido cum corpore, respuere ictus
nec penetrare pati sibi quicquam quod queat artas
dissociare intus partis, ut materiai
corpora sunt quorum naturam ostendimus ante,
aut ideo durare aetatem posse per omnem,
plagarum quia sunt expertia, sicut inane est
quod manet intactum neque ab ictu fungitur hilum,
aut etiam quia nulla loci fit copia circum,
quo quasi res possint discedere dissoluique,
sicut summarum summa est aeterna, neque extra
qui locus est quo dissiliant neque corpora sunt quae
possint incidere et valida dissolvere plaga.
at neque, uti docui, solido cum corpore mundi
naturast, quoniam admixtumst in rebus inane,
nec tamen est ut inane, neque autem corpora desunt,
ex infinito quae possint forte coorta
corruere hanc rerum violento turbine summam
aut aliam quamvis cladem importare per ictus,
nec porro natura loci spatiumque profundi

deficit, exspergi quo possint moenia mundi,
aut alia quavis possunt vi pulsa perire.
haud igitur leti praeclusa est ianua caelo
nec soli terraeque neque altis aequoris undis,
sed patet immane et vasto respectat hiatu.
quare etiam nativa necessumst confiteare
haec eadem ; neque enim, mortali corpore quae sunt,
ex infinito iam tempore adhuc potuissent
immensi validas aevi contemnere viris.

Fire and water have always striven and are always striving against each other, probably one of them will some day destroy the world, as legend tells us that fire nearly did at one time, and a great flood at another time : probably these legends are founded on real fact.

Denique tantopere inter se cum maxima mundi
pugnent membra, pio nequaquam concita bello,
nonne vides aliquam longi certaminis ollis
posse dari finem? vel cum sol et vapor omnis
omnibus epotis umoribus exsuperarint:
quod facere intendunt, neque adhuc conata patrantur:
tantum suppeditant amnes ultraque minantur
omnia diluviare ex alto gurgite ponti,
nequiquam, quoniam verrentes aequora venti
deminuunt radiisque retexens aetherius sol,
et siccare prius confidunt omnia posse
quam liquor incepti possit contingere finem.
tantum spirantes aequo certamine bellum
magnis ⟨inter se⟩ de rebus cernere certant,
cum semel interea fuerit superantior ignis
et semel, ut fama est, umor regnarit in arvis.
ignis enim superavit et ardens multa perussit,
avia cum Phaethonta rapax vis solis equorum
aethere raptavit toto terrasque per omnis.
at pater omnipotens ira tum percitus acri
magnanimum Phaethonta repenti fulminis ictu

deturbavit equis in terram, solque cadenti
obvius aeternam succepit lampada mundi
disiectosque redegit equos iunxitque trementis,
inde suum per iter recreavit cuncta gubernans,
scilicet ut veteres Graium cecinere poetae.
quod procul a vera nimis est ratione repulsum.
ignis enim superare potest ubi materiai
ex infinito sunt corpora plura coorta;
inde cadunt vires aliqua ratione revictae,
aut pereunt res exustae torrentibus auris.
umor item quondam coepit superare coortus,
ut fama est, hominum multas quando obruit urbis.
inde ubi vis aliqua ratione aversa recessit,
ex infinito fuerat quaecumque coorta,
constiterunt imbres et flumina vim minuerunt.

I will now describe the creation of the world and the movements of the heavenly bodies. The creation of the world was due not to conscious design, but to the chance collision of atoms after repeated combinations which at first were unproductive.

Sed quibus ille modis coniectus materiai
fundarit terram et caelum pontique profunda,
solis lunai cursus, ex ordine ponam.
nam certe neque consilio primordia rerum
ordine se suo quaeque sagaci mente locarunt
nec quos quaeque darent motus pepigere profecto,
sed quia multa modis multis primordia rerum
ex infinito iam tempore percita plagis
ponderibusque suis consuerunt concita ferri
omnimodisque coire atque omnia pertemptare,
quaecumque inter se possent congressa creare,
propterea fit uti magnum vulgata per aevum
omne genus coetus et motus experiundo
tandem conveniant ea quae convecta repente
magnarum rerum fiunt exordia saepe,
terrai maris et caeli generisque animantum.

Originally everything was in complete chaos with atoms colliding blindly in all directions, but gradually the various parts of the earth began to separate and assume a definite shape.

Hic neque tum solis rota cerni lumine largo
altivolans poterat nec magni sidera mundi
nec mare nec caelum nec denique terra neque aer
nec similis nostris rebus res ulla videri,
sed nova tempestas quaedam molesque coorta
omne genus de principiis, discordia quorum
intervalla vias conexus pondera plagas
concursus motus turbabat proelia miscens,
propter dissimilis formas variasque figuras
quod non omnia sic poterant coniuncta manere
nec motus inter sese dare convenientis.
diffugere inde loci partes coepere paresque
cum paribus iungi res et discludere mundum
membraque dividere et magnas disponere partis,
hoc est, a terris altum secernere caelum,
et sorsum mare, uti secreto umore pateret,
sorsus item puri secretique aetheris ignes.

The heavy atoms collected in the midst of this confusion forcing the lighter ones upwards and outwards, these rose and became (1) *the ether that encircles the world,* (2) *the heavenly bodies, and then the earth sank down and the sea water collected in the bed of the ocean. The heat of the ether and the sun caused the earth to become more and more condensed, and the water particles flowed into the sea while the ether particles passed into the sky, the result being that all the lighter particles were squeezed out of the earth and the heavy ones remained and formed the solid mass of the earth.*

Quippe etenim primum terrai corpora quaeque,
propterea quod erant gravia et perplexa, coibant
in medio atque imas capiebant omnia sedis ;
quae quanto magis inter se perplexa coibant,
tam magis expressere ea quae mare sidera solem
lunamque efficerent et magni moenia mundi.
omnia enim magis haec e levibus atque rotundis

seminibus multoque minoribu' sunt elementis
quam tellus. ideo, per rara foramina, terrae
partibus erumpens primus se sustulit aether
ignifer et multos secum levis abstulit ignis,
non alia longe ratione ac saepe videmus,
aurea cum primum gemmantis rore per herbas
matutina rubent radiati lumina solis
exhalantque lacus nebulam fluviique perennes,
ipsaque ut interdum tellus fumare videtur;
omnia quae sursum cum conciliantur, in alto
corpore concreto subtexunt nubila caelum.
sic igitur tum se levis ac diffusilis aether
corpore concreto circumdatus undique flexit
et late diffusus in omnis undique partis
omnia sic avido complexu cetera saepsit.
hunc exordia sunt solis lunaeque secuta,
interutrasque globi quorum vertuntur in auris;
quae neque terra sibi adscivit nec maximus aether,
quod neque tam fuerunt gravia ut depressa sederent,
nec levia ut possent per summas labier oras,
et tamen interutrasque ita sunt ut corpora viva
versent et partes ut mundi totius exstent;
quod genus in nobis quaedam licet in statione
membra manere, tamen cum sint ea quae moveantur.
his igitur rebus retractis terra repente,
maxima qua nunc se ponti plaga caerula tendit,
succidit et salso suffudit gurgite fossas.
inque dies quanto circum magis aetheris aestus
et radii solis cogebant undique terram
verberibus crebris extrema ad limina in artum,
in medio ut propulsa suo condensa coiret,
tam magis expressus salsus de corpore sudor
augebat mare manando camposque natantis,
et tanto magis illa foras elapsa volabant
corpora multa vaporis et aeris altaque caeli

densebant procul a terris fulgentia templa.
sidebant campi, crescebant montibus altis
ascensus; neque enim poterant subsidere saxa
nec pariter tantundem omnes succumbere partes.

So the earth gradually sank to the bottom separated from the lighter elements, sea and air, while the ether which is composed of the finest atoms rose above all the rest and remains unaffected by the lower elements and the storms that disturb them.

Sic igitur terrae concreto corpore pondus
constitit atque omnis mundi quasi limus in imum
confluxit gravis et subsedit funditus ut faex;
inde mare inde aer inde aether ignifer ipse
corporibus liquidis sunt omnia pura relicta,
et leviora aliis alia, et liquidissimus aether
atque levissimus aerias super influit auras,
nec liquidum corpus turbantibus aeris auris
commiscet; sinit haec violentis omnia verti
turbinibus, sinit incertis turbare procellis,
ipse suos ignis certo fert impete labens.
nam modice fluere atque uno posse aethera nisu
significat Pontos, mare certo quod fluit aestu
unum labendi conservans usque tenorem.

[MUNRO. 'The passage interrupts the fine flow and connexion of what precedes and follows.']

It is uncertain what causes the movements of the stars: (1) *if the sky revolves, its axis must be kept steady by a current of air pressing and blowing on each pole, and the stars are moved by a third current blowing above the sphere in the same direction as the course of the stars or beneath the sphere in the opposite direction, like a water-wheel;* (2) *if the sky does not revolve, then the movement of the stars is due to an internal heat or to an external air;* (3) *or they may move of their own volition and by their own agency in search of nourishment. Probably all these causes act in the different worlds, but it is impossible to decide to which of these causes the movement of the stars in our universe is due.*

[Motibus astrorum nunc quae sit causa canamus.
principio magnus caeli si vertitur orbis,

ex utraque polum parti premere aera nobis
dicendum est extraque tenere et claudere utrimque;
inde alium supra fluere atque intendere eodem
quo volvenda micant aeterni sidera mundi;
aut alium subter, contra qui subvehat orbem,
ut fluvios versare rotas atque haustra videmus.
est etiam quoque uti possit caelum omne manere
in statione, tamen cum lucida signa ferantur;
sive quod inclusi rapidi sunt aetheris aestus
quaerentesque viam circum versantur et ignes
passim per caeli volvunt summania templa;
sive aliunde fluens alicunde extrinsecus aer
versat agens ignis; sive ipsi serpere possunt
quo cuiusque cibus vocat atque invitat euntis,
flammea per caelum pascentes corpora passim.
nam quid in hoc mundo sit eorum ponere certum
difficile est; sed quid possit fiatque per omne
in variis mundis varia ratione creatis,
id doceo plurisque sequor disponere causas,
motibus astrorum quae possint esse per omne;
e quibus una tamen siet hic quoque causa necessest
quae vegeat motum signis; sed quae sit earum
praecipere haudquaquamst pedetemptim progredientis.]

The earth remains at rest in the midst of the world because its composition is lighter below than it is above: in fact the substance beneath is more similar to air. Thus it is an organic part of the whole universe, and from long union and connexion ever since the beginning it does not feel its great weight any more than the weight of a man's limbs affects and tires him: the light air sustains and supports the heavier earth just as the light soul sustains and supports the heavier body.

Terraque ut in media mundi regione quiescat,
evanescere paulatim et decrescere pondus
convenit, atque aliam naturam subter habere
ex ineunte aevo coniunctam atque uniter aptam
partibus aeriis mundi quibus insita vivit.

propterea non est oneri neque deprimit auras ;
ut sua cuique homini nullo sunt pondere membra
nec caput est oneri collo nec denique totum
corporis in pedibus pondus sentimus inesse ;
at quaecumque foris veniunt impostaque nobis
pondera sunt laedunt, permulto saepe minora.
usque adeo magni refert quid quaeque queat res.
sic igitur tellus non est aliena repente
allata atque auris aliunde obiecta alienis,
sed pariter prima concepta ab origine mundi
certaque pars eius, quasi nobis membra, videtur.
praeterea grandi tonitru concussa repente
terra supra quae se sunt concutit omnia motu ;
quod facere haud ulla posset ratione, nisi esset
partibus aeriis mundi caeloque revincta.
nam communibus inter se radicibus haerent
ex ineunte aevo coniuncta atque uniter apta.
nonne vides etiam quam magno pondere nobis
sustineat corpus tenuissima vis animai
propterea quia tam coniuncta atque uniter apta est ?
denique iam saltu pernici tollere corpus
quid potis est nisi vis animae quae membra gubernat ?
iamne vides quantum tenuis natura valere
possit, ubi est coniuncta gravi cum corpore, ut aer
coniunctus terris et nobis est animi vis ?

The sun and moon and stars are all really of about the same size as they appear to us to be : and whether they shine with their own or borrowed light does not affect the question. We can be sure of this, for fires on earth do not appear to grow much smaller though we get further away from them.

Nec nimio solis maior rota nec minor ardor
esse potest, nostris quam sensibus esse videtur.
nam quibus e spatiis cumque ignes lumina possunt
adicere et calidum membris adflare vaporem,
nil illa his intervallis de corpore libant

flammarum, nil ad speciem est contractior ignis.
proinde, calor quoniam solis lumenque profusum
perveniunt nostros ad sensus et loca mulcent,
forma quoque hinc solis debet filumque videri,
nil adeo ut possis plus aut minus addere, vere.
lunaque sive notho fertur loca lumine lustrans
sive suam proprio iactat de corpore lucem,
quidquid id est, nilo fertur maiore figura
quam, nostris oculis qua cernimus, esse videtur.
nam prius omnia, quae longe semota tuemur
aera per multum, specie confusa videntur
quam minui filum. quapropter luna necesse est,
quandoquidem claram speciem certamque figuram
praebet, ut est oris extremis cumque notata
quantaque quantast hinc nobis videatur in alto.
postremo quoscumque vides hinc aetheris ignis ;
quandoquidem quoscumque in terris cernimus ⟨ignis⟩,
dum tremor est clarus, dum cernitur ardor eorum,
perparvum quiddam interdum mutare videntur
alteram utram in partem filum, quo longius absunt:
scire licet perquam pauxillo posse minores
esse vel exigua maiores parte brevique.

Though the sun is really so very small, it is able to emit great heat owing to one of three causes: (1) *the sun is the well-head to which all the fire of the world flows;* (2) *the air near the sun catches fire and receives the heat of the sun;* (3) *there is a large amount of invisible heat round the sun increasing the warmth but not the light given by the sun.*

Illud item non est mirandum, qua ratione
tantulus ille queat tantum sol mittere lumen,
quod maria ac terras omnis caelumque rigando
compleat et calido perfundat cuncta vapore.
nam licet hinc mundi patefactum totius unum
largifluum fontem scatere atque erumpere lumen,
ex omni mundo quia sic elementa vaporis

undique conveniunt et sic coniectus eorum
confluit, ex uno capite hic ut profluat ardor.
nonne vides etiam quam late parvus aquai
prata riget fons interdum campisque redundet?
est etiam quoque uti non magno solis ab igni
aera percipiat calidis fervoribus ardor,
opportunus ita est si forte et idoneus aer,
ut queat accendi parvis ardoribus ictus;
quod genus interdum segetes stipulamque videmus
accidere ex una scintilla incendia passim.
forsitan et rosea sol alte lampade lucens
possideat multum caecis fervoribus ignem
circum se, nullo qui sit fulgore notatus,
aestifer ut tantum radiorum exaugeat ictum.

The sun has an annual, the moon a monthly course in the sky. Democritus says the revolution of the heaven has less effect, less driving force on a body the nearer it is to the earth; the moon is nearer than the sun, so it travels slower: in like manner the sun travels slower than the stars, which are still further distant. Or perhaps two currents of air blowing alternately in different directions drives the heavenly bodies along at varying paces at different seasons.

Nec ratio solis simplex ⟨et⟩ certa patescit,
quo pacto aestivis e partibus aegocerotis
brumalis adeat flexus atque inde revertens
cancri se ut vertat metas ad solstitialis,
lunaque mensibus id spatium videatur obire,
annua sol in quo consumit tempora cursu.
non, inquam, simplex his rebus reddita causast.
nam fieri vel cum primis id posse videtur,
Democriti quod sancta viri sententia ponit,
quanto quaeque magis sint terram sidera propter,
tanto posse minus cum caeli turbine ferri.
evanescere enim rapidas illius et acris
imminui subter viris, ideoque relinqui

paulatim solem cum posterioribu' signis,
inferior multo quod sit quam fervida signa.
et magis hoc lunam: quanto demissior eius
cursus abest procul a caelo terrisque propinquat,
tanto posse minus cum signis tendere cursum.
flaccidiore etenim quanto iam turbine fertur
inferior quam sol, tanto magis omnia signa
hanc adipiscuntur circum praeterque feruntur.
propterea fit ut haec ad signum quodque reverti
mobilius videatur, ad hanc quia signa revisunt.
fit quoque ut e mundi transversis partibus aer
alternis certo fluere alter tempore possit,
qui queat aestivis solem detrudere signis
brumalis usque ad flexus gelidumque rigorem,
et qui reiciat gelidis a frigoris umbris
aestiferas usque in partis et fervida signa.
et ratione pari lunam stellasque putandumst,
quae volvunt magnos in magnis orbibus annos,
aeribus posse alternis e partibus ire.
nonne vides etiam diversis nubila ventis
diversas ire in partis inferna supernis?
qui minus illa queant per magnos aetheris orbis
aestibus inter se diversis sidera ferri?

Night is due (1) *to the extinction of the fires of the sun after the exhaustion of the long journey across the sky;* (2) *to the fact that the sun is compelled to continue his course under the earth by the same force that raised him above it.*

At nox obruit ingenti caligine terras,
aut ubi de longo cursu sol ultima caeli
impulit atque suos efflavit languidus ignis
concussos itere et labefactos aere multo,
aut quia sub terras cursum convertere cogit
vis eadem, supra quae terras pertulit orbem.

Daylight returns because (1) *the same sun reappears again above the earth;* (2) *a new sun appears composed of fresh fires streaming together every morning at the proper time; the latter is quite a natural explanation, for nature acts regularly and phenomena of nature recur regularly, such as crops or the different conditions of weather and the seasons which vary fairly regularly at fixed intervals during the year.*

Tempore item certo roseam Matuta per oras
aetheris auroram differt et lumina pandit,
aut quia sol idem, sub terras ille revertens,
anticipat caelum radiis accendere temptans,
aut quia conveniunt ignes et semina multa
confluere ardoris consuerunt tempore certo,
quae faciunt solis nova semper lumina gigni;
quod genus Idaeis fama est e montibus altis
dispersos ignis orienti lumine cerni,
inde coire globum quasi in unum et conficere orbem.
nec tamen illud in his rebus mirabile debet
esse, quod haec ignis tam certo tempore possunt
semina confluere et solis reparare nitorem.
multa videmus enim, certo quae tempore fiunt
omnibus in rebus. florescunt tempore certo
arbusta et certo dimittunt tempore florem.
nec minus in certo dentis cadere imperat aetas
tempore et impubem molli pubescere veste
et pariter mollem malis demittere barbam.
fulmina postremo nix imbres nubila venti
non nimis incertis fiunt in partibus anni.
namque ubi sic fuerunt causarum exordia prima
atque ita res mundi cecidere ab origine prima,
conseque quoque iam redeunt ex ordine certo.

Days and nights lengthen and shorten according to the season because (1) *the length of the path of the sun above and below the earth is equal only at the equinoxes, therefore during the rest of the year a long day is followed by a short one or vice versa;* (2) *perhaps the air is denser in certain parts and prevents him from travelling so fast, thereby lengthening the night in winter;*

(3) *perhaps if a new sun is born daily, the fires collecting now quickly, now slowly, at different seasons affect the length of the day.*

Crescere itemque dies licet et tabescere noctes,
et minui luces, cum sumant augmina noctes,
aut quia sol idem sub terras atque superne
imparibus currens anfractibus aetheris oras
partit et in partis non aequas dividit orbem,
et quod ab alterutra detraxit parte, reponit
eius in adversa tanto plus parte relatus,
donec ad id signum caeli pervenit, ubi anni
nodus nocturnas exaequat lucibus umbras.
nam medio cursu flatus aquilonis et austri
distinet aequato caelum discrimine metas
propter signiferi posituram totius orbis,
annua sol in quo concludit tempora serpens,
obliquo terras et caelum lumine lustrans,
ut ratio declarat eorum qui loca caeli
omnia dispositis signis ornata notarunt.
aut quia crassior est certis in partibus aer,
sub terris ideo tremulum iubar haesitat ignis
nec penetrare potest facile atque emergere ad ortus.
propterea noctes hiberno tempore longae
cessant, dum veniat radiatum insigne diei.
aut etiam, quia sic alternis partibus anni
tardius et citius consuerunt confluere ignes
qui faciunt solem certa desurgere parte,
propterea fit uti videantur dicere verum

* * * * * *

(1) *The moon may borrow her light from the sun, increasing it as she recedes from him, being at the full when right opposite the sun and diminishing as she approaches again, and being quite dark when the earth is between her and the sun;* (2) *the moon may shine with her own light and be darkened by an invisible satellite getting in between her and the earth and partially or totally intercepting the light;* (3) *perhaps, as the Chaldaeans say, she is a sphere of which only one half is bright and by her revolution she shows different phases;* (4) *perhaps*

a new moon is born every day presenting different phases successively. Regular succession is characteristic of nature, for instance the recurrence of the four seasons.

Luna potest solis radiis percussa nitere
inque dies magis ⟨id⟩ lumen convertere nobis
ad speciem, quantum solis secedit ab orbi,
donec eum contra pleno bene lumine fulsit
atque oriens obitus eius super edita vidit;
inde minutatim retro quasi condere lumen
debet item, quanto propius iam solis ad ignem
labitur ex alia signorum parte per orbem;
ut faciunt, lunam qui fingunt esse pilai
consimilem cursusque viam sub sole tenere.
est etiam quare proprio cum lumine possit
volvier et varias splendoris reddere formas.
corpus enim licet esse aliud quod fertur et una
labitur omnimodis occursans officiensque
nec potis est cerni, quia cassum lumine fertur.
versarique potest, globus ut, si forte, pilai
dimidia ex parti candenti lumine tinctus,
versandoque globum variantis edere formas,
donec eam partem, quaecumque est ignibus aucta,
ad speciem vertit nobis oculosque patentis;
inde minutatim retro contorquet et aufert
luciferam partem glomeraminis atque pilai;
ut Babylonica Chaldaeum doctrina refutans
astrologorum artem contra convincere tendit,
proinde quasi id fieri nequeat quod pugnat uterque
aut minus hoc illo sit cur amplectier ausis.
denique cur nequeat semper nova luna creari
ordine formarum certo certisque figuris
inque dies privos aborisci quaeque creata
atque alia illius reparari in parte locoque,
difficilest ratione docere et vincere verbis,
ordine cum ⟨possint⟩ tam certo multa creari.

it ver et Venus, et Veneris praenuntius ante
pennatus graditur, Zephyri vestigia propter
Flora quibus mater praespargens ante viai
cuncta coloribus egregiis et odoribus opplet.
inde loci sequitur calor aridus et comes una
pulverulenta Ceres ⟨et⟩ etesia flabra aquilonum.
inde autumnus adit, graditur simul Euhius Euan.
inde aliae tempestates ventique sequuntur,
altitonans Volturnus et auster fulmine pollens.
tandem bruma nives adfert pigrumque rigorem
reddit hiemps, sequitur crepitans hanc dentibus algor.
quo minus est mirum si certo tempore luna
gignitur et certo deletur tempore rursus,
cum fieri possint tam certo tempore multa.

Eclipses of the sun are due (1) *to the moon or some other invisible body intercepting the light;* (2) *to the temporary passage of the sun through air that is hostile to its light. And the same explanations hold good of eclipses of the moon.*

Solis item quoque defectus lunaeque latebras
pluribus e causis fieri tibi posse putandumst.
nam cur luna queat terram secludere solis
lumine et a terris altum caput obstruere ei,
obiciens caecum radiis ardentibus orbem ;
tempore eodem aliud facere id non posse putetur
corpus quod cassum labatur lumine semper ?
solque suos etiam dimittere languidus ignis
tempore cur certo nequeat recreareque lumen,
cum loca praeteriit flammis infesta per auras,
quae faciunt ignis interstingui atque perire ?
et cur terra queat lunam spoliare vicissim
lumine et oppressum solem super ipsa tenere,
menstrua dum rigidas coni perlabitur umbras ;
tempore eodem aliud nequeat succurrere lunae
corpus vel supra solis perlabier orbem,
quod radios interrumpat lumenque profusum ?

et tamen ipsa suo si fulget luna nitore,
cur nequeat certa mundi languescere parte,
dum loca luminibus propriis inimica per exit?

I have explained the movements of the heavenly bodies, and I will now describe the creation of the world and its products in the earliest stages.

Quod superest, quoniam magni per caerula mundi
qua fieri quicquid posset ratione resolvi,
solis uti varios cursus lunaeque meatus
noscere possemus quae vis et causa cieret,
quove modo ⟨possent⟩ offecto lumine obire
et neque opinantis tenebris obducere terras,
cum quasi conivent et aperto lumine rursum
omnia convisunt clara loca candida luce,
nunc redeo ad mundi novitatem et mollia terrae
arva, novo fetu quid primum in luminis oras
tollere et incertis crerint committere ventis.

NOTES

1. **potis** is an indecl. adj.; cf. l. 560 *quid potis est*, l. 719 *nec potis est cerni*. The form *pote*, which is also used by Lucretius, is merely a weakened form of *potis* and is not the neuter. For instance we find *qui potis est*? Catull. 72. 7, 'how is it possible?' and conversely *nec quisquam pote dicere*, Catull. 67. 11, 'no one is able to say'. We also find *potis* used with plural auxiliary verbs. For the weakened form *pote* Duff aptly cites *mage* and *magis*.

potis pollenti pectore: notice the alliteration of the *p* and *t*: always be on the watch for alliteration in reading Lucretius: he often uses it when he wishes to drive a point home; cf. ll. 11–12 below, and l. 53.

dignum . . . pro: the usual construction after *dignum* is the plain ablative, but it is followed also, though rarely, by *pro* and *ad* in Cicero and the poets: perhaps *pro* has the force 'in consideration of'.

pectore: the heart, not the head, was considered by Lucretius to be the seat of the intellect. See ll. 18, 103.

2. **repertis**: here a subst., as in l. 13 below.

3. **qui . . . possit**: *qui* consecutive followed by the subj.

4. **eius qui**: Epicurus, the great master of Lucretius. His philosophy was based upon that of Democritus, mentioned in terms of great reverence l. 622. See Introduction: The Philosophy of Epicurus.

5. **parta . . . quaesita** are probably synonymous terms; we shall find that Lucretius frequently employs repetition of words of similar meaning even where he does not intend to convey any especial force or meaning; cf. l. 314. Others have taken it as a case of hysteron proteron, 'obtained and sought,' but this is most unlikely.

liquit: left to his intellectual heirs.

6. **cretus**, from *cresco*, has here the meaning 'sprung from', with no sense of the meaning of increase usually conveyed by *cresco*.

7. **si ut**: an instance of hiatus: the quantity of *si* is shortened here; cf. l. 74 *qui in orbi*. Duff: 'This hiatus is very common in Plautus and Terence and is even found in Horace *si mĕ amas* and Vergil *tĕ amice*.'

8. **deus ille fuit**: *deus* as used by Verg. *Ecl.* v. 64 *deus, deus ille, Menalca*. For a similar expression cf. l. 622 *Democriti sancta sententia*. See note, l. 19.

Memmi: Gaius Memmius was a Roman noble of distinguished birth: after holding the praetorship he served as propraetor of Bithynia. It was to this Memmius that Lucretius dedicated his poem. Whether he was actually worthy of the honour is open to doubt. The passage *deus ille fuit, deus, qui princeps* (= *primus*)

vitae rationem invenit, Lucretius' praise of Epicurus, is perhaps imitated by Vergil in his praise of Lucretius, *Georg.* ii. 490 *felix, qui potuit rerum cognoscere causas.* Epicurus was in Lucretius' opinion the first to discover the truly wise method of living. The vocative appeals for special attention on the part of the reader. Cf. ll. 93, 164.

11–12. For the alliteration see note, l. 1.

12. **tranquillo**: subst. So too in Verg. *Aen.* v. 127 *tranquillo silet.*

13. **reperta**: subst. as in l. 2. Notice the omission of the copula; there are other instances (ll. 24, 32, 295–6, 663).

15. **vitigeni**: the poetical form of the prose adjective *vitigineus.*

instituisse: orig. to plant, secondly to establish, institute, thirdly to teach: all three meanings are combined here. Notice the polysyllabic word at the end of the hexameter, very frequent in Lucretius: contrast l. 25.

16–18. We could live without corn or wine, substitutes might be found: we cannot live in the highest sense of the word without a pure heart.

17. Flesh-eating tribes which had not yet reached the pitch of civilization when agriculture is practised.

etiam nunc: see ll. 332, 333.

18. **bene vivere**, 'live a good life,' i.e. that of the truly wise man.

pectore: here of the moral qualities; cf. l. 1.

puro pectore: cf. l. 43 *at nisi purgatumst pectus.*

19. **hic**: Epicurus.

deus: as in l. 8, of persons. See L. & S. *deus* II, *deus ille noster Plato*, in Cicero. Cf. too the use of *rex* implying a great man. L. & S. *rex* B. 2. See note, l. 8.

20. **didita**: *dido* (*disdo*) is used chiefly in the poets.

quo refers to Epicurus.

nunc etiam: for *etiam nunc* see l. 332.

21. **vitae** depends of course on *solacia.*

solacia: the contentment rising from a good conscience and the possession of a pure heart.

22. **Herculis**: if Hercules who was originally a hero, born of a god and a mortal, was deified for the temporal benefits conferred on mankind by him, surely Epicurus who revealed spiritual blessings to the world should also win a place in Heaven. The emphasis laid on Hercules is due to the fact that the Stoics had selected him as their typical hero.

23. **ratione**, 'reasoning.'

ferēre: for *ferēris*; this termination is avoided when confusion with the pres. inf. act. would result.

24. **Nemeaeus hiatus . . . leonis**: for *Nemeaei*: cf. Verg. *Aen.* viii. 526 *Tyrrhenusque tubae clangor.*

25. **sus**: here we have a monosyllable at the end of the line; contrast l. 15.

horrens, 'bristly.'

obesset: as Duff notes, the protasis is *si viveret* understood, as *posset*, l. 27.

26. **denique**: here as often in Lucretius = *porro, praeterea*, not 'lastly'.

27. **vallata**: a strong word, lit. surrounded by a vallum, a palisade, or entrenchment.

posset is practically equal in meaning to *obesset* here.

28. **tripectora**: ἅπαξ λεγ.; cf. Verg. *Aen.* vi. 289 *forma tricorporis umbrae.* Aesch. *Ag.* 870 calls him τρισώματος. Notice the archaic genit. **Geryonai**; cf. l. 69 *lunai.*

tergemini: poetical for *trigemini.* Observe how Lucretius piles up his epithets almost to redundance.

This line was supplied by Munro: he suggests that it may have fallen out from the fact that it began with *quid* as the preceding line.

29. **officerent**: as *obesset* above, l. 25. These may be the Harpies.

30. Imitated by Verg. *Georg.* ii. 140 *tauri spirantes naribus ignem.*

31. **propter**: Duff observes that *propter*, meaning 'near', is frequently found, as here, after the word it governs; cf. ll. 623, 738. But contrast l. 35. Cf. *eum contra*, l. 708, *loca . . . inimica per*, l. 770.

32. **aurea . . . fulgentia**: see note, l. 13.

33. **asper, acerba tuens**: another line imitated by Verg. *Aen.* ix. 794. Observe the adverbial use of the adj. Cf. l. 91 *plura.*

35. **pelagi**: genit. depending on *severa* used as a subst.; cf. l. 417 *pontique profunda.* Others read *pelage*, a Greek plur. as in vi. 619. Cf. *mele* and *cete* from μέλος and κῆτος.

36. **noster** is opposed to *barbarus* and therefore is obviously for the prose *nostras.* With **audet** sc. *adire.*

37. **de genere hoc**: for *huius generis*: so too l. 164.

38. In this line we have an apodosis with a double protasis *si . . . forent . . . viva* (= *si viverent*).

39. **ita**, 'to such an extent.'

satiatem: *metri gratia* for *satietatem.* Cf. l. 184.

40. **scatit**: as in ll. 598, 952 *scatĕre.* Lucretius uses this verb both in the second and third conjugation; cf. l. 1095 *fulgĕre.* The proper construction is with the abl.

41. **profundas**: running deep back into the hills; **nemora** and **silvas** are practically the same; cf. note, l. 5.

42. **quae**: translate as *et ea.*

est nostra potestas: Lucretius uses this periphrasis for *possumus* more than once.

43. **purgatumst**: *purgatum est*; the combination of these two syllables in crasis was less offensive to the Roman ear than actual elision in poetry, especially in the case of monosyllables as in the next line, *tumst*; cf. l. 131. The phrase is like *puro pectore*, l. 18.

43–4. **proelia . . . pericula**: note the use of the gerund in the active, instead of the passive gerundive, which would be the construction in prose. Lucretius uses the former construction not infrequently. It is found in Cic. *de Senect.* 2. 6 *viam quam nobis ingrediendum sit.* Duff: 'This construction was dropped by later writers, though

it was always kept in Greek, *ὠφελητέον τὴν πόλιν* being as good as *ὠφελητέα ἡ πόλις*.' For **insinuandum** at the end of the line see note, l. 15.

44. **ingratis**: contr. for *ingratiis*, from *ingratia*, not from *ingratus*. Both forms are used in prose and verse.

45. **cuppedinis**: used by Lucretius for *cupido*.

47. Observe the unusual, halting rhythm of the line; this is emphasized still further by the *a* of *superbia* before the *sp* of *spurcitia* being short. Poets of the golden age, for the most part, do not place a short vowel before *sc*, *sp*, *st*: it is not uncommon in Propertius, but cf. Ov. *Her.* v. 26 *nostri littera scripta memor*, and the still stronger instance, Lucretius vi. 195 *pendentibu' structas*. l. 79 *libera sponte*.

48. **luxus**: probably plural, like *desidiae*, 'different instances of . . .'

49–50. **subegerit . . . expulerit**: perf. subj. after *qui* = *cum is*.

51. Surely this man is a true hero and deserves the name of god far more than the gods who are supposed to bestow temporal blessings on mortals.

numero divum: l. 123 *in deum numero*.

dignarier: archaic for *dignari*, from the active verb *digno*, not the deponent *dignor*. Cf. l. 166 *largirier*, l. 475 *labier*, l. 716 *volvier*, l. 730 *amplectier*, l. 766 *perlabier*.

53. **immortalibu'**: a favourite suppression of final *s* in Lucretius: the usage is common also in the earlier Latin poets: final *s*, especially in short syllables, was sounded very lightly. Cf. ll. 456, 627.

de divis dare dicta: notice the alliteration; see note, l. 1. Cicero tells us that Epicurus wrote a book *περὶ θεῶν*: we have only a few letters and some fragments and quotations left (*κύριαι δόξαι*, the creed of Epicurus).

sŭērit: perf. subj. for *sŭēverit*. Cf. l. 912 *sŭēsse*, but *consŭērunt*, ll. 189, 661, 702.

54. **rerum naturam**: i.e. natural science.

dictis is more than mere words; it means 'sayings', 'doctrines', cf. l. 113.

55–75. Duff gives a useful hint for translating this long sentence: 'It may be split up into three sentences of four (55–8), five (59–63), and twelve (64–75) lines each. In this case *dum* must not be translated.

56–7. **quo quaeque . . .**: rearrange for translation *doceo quam necessum sit quaeque* (from *quisque*) *durare in eo foedere* (law) *quo creata sint*.

durare is intransitive as in l. 356.

necessum: archaic for *necesse* (neut. adj.); *necessus* is also found, see l. 351.

58. **nec**: Munro, i.e. *quamque non . . .*; notice the alliteration of *v*.

59. Translate as a new sentence.

in primis primum, 'first and foremost,' cf. l. 336 *primus cum primis*.

animi natura is nothing more than *animus*, the mind or reasoning, so in ll. 127, 132 and elsewhere in this book. See notes, ll. 69, 235, 239, 331, 370.

60. **nativo**: that had birth, and is therefore mortal and so must have an end = *mortalis*: so too in l. 66. Cf. iii. 417 *nativos et mortales esse animos ut noscere possis*. Cf. ll. 65–6, 238.

creta: as in l. 6.

61. **durare**: intrans. as above, l. 57.

incolumis: predicative.

62. **simulacra solere**: acc. and inf. after *repertum est* understood out of *reperta*.

62–3. Dreams do not prove that the soul is immortal just because we see in them persons that are dead: that is shown by the fact that we often dream of things happening to us which have never actually occurred.

63. **cum videamur**: *cum* is purely temporal, the subj. is probably due to the idea of repetition, properly it should be in the indic.; cf. l. 681. Duff compares ὅταν τοῦτο γένηται.

64–75. Translate as a fresh sentence.

quod superest: a favourite phrase of Lucretius (ll. 91, 772), 'to proceed to what remains', 'moreover'; *rationis ordo*, 'the logical sequence of my plan (or design),' sc. *me* with *detulit*.

65–6. **mortali . . . nativum**: see note, l. 60.

nativum, as there, 'that had birth,' and therefore is *mortali corpore*, 'of mortal body.'

reddunda: the archaic form of the gerundive; cf. the legal term *res repetundae*. Cf. *gignundis*, l. 181, *experiundo*, l. 428.

67. Compare ll. 416–17. *congressus materiai*, 'union of matter caused by the perpetual collision of atoms to which Epicurus attributed the creation of the world from chaos': see the Introduction: Philosophy of Epicurus. *materies* in Lucretius = ὕλη.

ille is vivid, 'yon.'

materiai: archaic genit., cf. l. 354. *Geryonai*, l. 28, and *lunai*, l. 69, *vitai*, l. 208, *terrai*, l. 431, *animai*, l. 557, *aquai*, l. 602, *pilai*, ll. 713, 720, 726, *viai*, l. 739.

68. **fundarit**: perf. subj. This subj. and the following are indirect questions after *ratio reddunda sit*. Notice the asyndeton: contrast l. 115. See especially ll. 438–9.

69. **lunaique globum**: a characteristic periphrasis for *lunam*; cf. *animi natura*, l. 59, and l. 235 *terrai corpus*.

animantes: as also in l. 431, this word is masc. to denote man, fem. to denote animals; it is also used in the neut. Observe the archaic genit.

70. **nullo . . . tempore** = *numquam*, but stronger; cf. l. 878 *sed neque Centauri, nec tempore in ullo esse queunt*.

71. **quove**: for *quoque*, so too *quidve* for *quidque*. Munro believes this use of *ve* for *que* is due to a wish not to confuse the relative with *quisque*. So too in l. 776.

72. **vesci** = *uti*: cf. Pacuvius *vesci armis*, and Cic. *Fin.* v. 57

vesci voluptatibus: and cf. l. 857 *vesci vitalibus auris*, where the meaning is closer to the usual signification of the word.

73. **divum metus**: it is this superstitious fear which men call religion that Lucretius wishes to drive from their minds by showing how illogical it is.

74. **quĭ in**: for the hiatus cf. note, l. 7.

orbi is the archaic abl. as in l. 707. Cf. ll. 142, 604 *igni*, ll. 511, 721 *parti*.

sancta: predicative.

75. Notice the asyndeton, contrast l. 115. See especially ll. 438–9.

77. **flectat**: subj. of indirect question. The metaphor is from steering a ship as in l. 12. The metaphor is taken from the sea. Cf. l. 107 *flectat fortuna gubernans*. Munro: 'The Epicurean nature is at one and the same time blind chance and inexorable necessity.' This may be an exaggerated remark, but it contains some truth. See note, l. 186.

78. **ne . . . reamur**: final not prohibitive, so in l. 114.

79. **libera sponte**: see note, l. 47.

cursus perennis, 'traverse their ceaseless orbits,' internal acc. after **lustrare**. Cic. *N. D.* ii. 53 *latitudinem lustrans signiferi orbis*.

80. **morigera ad**: *morigerus* is also constructed with the dat. This is sarcastic, as he maintains that the heavenly bodies are themselves bound by the absolute law of nature: they neither move independently nor are they controlled by the gods.

81. **ratione**, 'forethought,' the reasoning mind which plans out a carefully prepared line of action.

82. **securum agere aevum**: as in Tennyson, *Lotos-Eaters*:

'In the hollow Lotos-land to live and lie reclined
On the hills like Gods together, careless of mankind.
For they lie beside their nectar . . .
Where they smile in secret, looking over wasted lands,
Blight and famine, plague and earthquake, roaring deeps and fiery sands, . . .
But they smile, they find a music centred in a doleful song
Steaming up . . .
Chanted from an ill-used race of men that cleave the soil,
Sow the seed, and reap the harvest with enduring toil,
Storing yearly little dues of wheat, and wine and oil;
Till they perish and they suffer—some, 'tis whisper'd—down in hell
Suffer endless anguish.'

This passage gives a very fair idea of the view which Lucretius held of the gods and their attitude to mankind. Hor. *Sat.* i. 5. 101 *deos didici securum agere aevum*, holds the same view.

Munro observes that ll. 82–90 are the same as in vi. 58–66 and remarks: 'In our passage of six and thirty lines the first one and twenty form a single, long, loose, ill-assorted, ill-constructed sentence: the last nine are repeated elsewhere. All this is another proof that the author left his work in an unfinished state.'

83. **si tamen interea**: a rather redundant expression, 'if how-

ever, in spite of it all', cf. l. 394; *interim* is used in the same sense. Duff adds = *eodem tempore*, ll. 756, 765.

84. **possint**: subj. of indirect question.

85. **supera**: the original archaic form of *supra*, practically confined to poetry, l. 326. *oris*, l. 224 *luminis oras*, cf. ll. 475, 781 (like *plăga*, Verg. *Aen.* i. 394 *aetheria . . . plaga*), is used of the regions of the air. *aether*, *aetherius*, the calm pure upper air, *aer*, *aerius*, the thick lower air, the atmosphere. The same distinction holds good in Greek *αἰθήρ*, *ἀήρ*. The former is the habitation of the gods, the latter surrounds earth, the habitation of man.

86. **religiones**, 'superstitions'; probably derived from *relig* (in *ligo*), bind down: scan first syllable long, *metri gratia*, as in l. 114. See note, l. 280.

87. **dominos acris**, 'hard taskmasters,' the gods: not that the gods are really ill-disposed to mortals or treat them badly, but man has voluntarily and ridiculously taken the self-imposed yoke and burden of religion (or superstition) upon his own shoulders.

omnia posse = *esse omnipotentes*: *omnia* internal acc., cf. l. 185 *quid . . . possent*; for *posse* in this sense cf. Verg. *Aen.* v. 231 *possunt, quia posse videntur*.

88. **queat . . . nequeat**: subj. of indirect question.

89–90. These lines occur i. 76–7.

90. **terminus**: the metaphor is from a stone pillar firmly fixed in the ground as a boundary between two properties. Here it is the immovable barrier between *quid queat esse*, the possible, and *quid nequeat esse*, the impossible.

terminus is also used of the immovable barrier of fate. Accius 481 *veter fatorum terminus*, cf. Hor. *Carm. Saec.* 26 *stabilis rerum Terminus*, where it is personified.

91. **quod superest**: as in l. 64.

plura: as in l. 33.

92. **tuēre**: here, but *tuĕre*, l. 318; *tui*, 'to see': *tueri*, 'see,' or 'maintain'.

93–4. **naturam triplicem . . .**: the three great divisions of the world earth, sea, and sky. Ov. *Trist.* ii. 425–6 refers to this *Lucretius . . . casurumque triplex vaticinatur opus. tria talia texta*, 'three such marvellous textures (fabrics)' yet doomed to perish as the next lines affirm.

Memmi: see note, l. 8.

95. **una dies dabit . . .**: this phrase is repeated in l. 1000, and imitated by Ov. *Am.* i. 15. 23–4 where he shows what reverence he felt for Lucretius' genius: *carmina sublimis tunc sunt peritura Lucreti, exitio terras cum dabit una dies*.

96. **ruet**, 'rush headlong to ruin'; *ruo* is used by the poets both in the transitive and intransitive sense; cf. l. 1325 *terram minitanti fronte ruebant*. Observe the *m* alliteration.

moles et machina: vast in size and complex in construction, formed as Munro says by *natura daedala rerum*, l. 234.

97. **animi**: locative. Cf. the use of *pendeo* with *animi*, L. & S. *pendeo* II. E.

res nova miraque is the complement of *accidat* to which *exitium futurum* is the subject.

98. **accidat**: subj. of indirect question.

99. **pervincere**: to carry my point in this matter.

100. **ubi apportes**: so Lucretius has *cum videas*, *ubi videas*. The adverb **ante** goes with **insolitam**, 'hitherto unexampled.'

101. **visu**: dative, contracted for *visui*.

102. **indu**: an archaism for *in*, cf. *endo mari* for *in mari*, vi. 890. Cf. ἔνδον, l. 876 *indupedita*, l. 1227 we have *induperator*, i. 82 *indugredi*. In ii. 1096, we have this very phrase *indu manu*. See L. & S. *in* init.

via . . . munita: the highway or causeway of the Roman road was often raised above the level of the land through which it passed, therefore *munire* was a most appropriate word for building a road. We trust the evidence of our senses of sight and touch more readily than argument which our mind receives by the sense of hearing. Duff quotes Hor. *A. P.* 180 *segnius irritant animos demissa per aurem, quam quae sunt oculis subiecta fidelibus*. Cf. Tennyson, *Enoch Arden* 'Things seen are mightier than things heard'.

103. **templa**, 'the quarters' of the mind are in the breast. Lucretius also uses the phrase *linguai templa*, iv. 624, l. 490–1 *caeli templa*, l. 521 *summania templa*.

pectus: the seat of the intelligence, see note, l. 1.

104. **dabit . . . fidem**: as we say 'give evidence', see note, l. 347. The subj. is much more common after *forsitan*: the indic. is found in poets and post-Augustan prose-writers.

105. **graviter**: take with *conquassari*.

107. **flectat**: see notes, ll. 77, 186. The optative use of the subj.

108. May reasoning rather than actual reality convince you of the truth of these assertions.

110–234. Munro: 'Here the argument is interrupted and it is again taken up at 235'; it is therefore a later addition and is not welded into the poem so as to form an organic whole; this indicates that the poet left his work in an unfinished state.

110. Before I reveal the decrees of fate about the annihilation of the world.

aggredior with infin. is chiefly poetical: so too l. 167.

111–12. These lines are repeated from i. 738–9. The Pythian priestess sat on a tripod which was wreathed with myrtle garlands as was also her brow. Ar. *Plut.* 39 τί δῆτα Φοῖβος ἔλακεν ἐκ τῶν στεμμάτων;

ratione, 'reasoning power.'

tripode: in i. 739 *tripodi* is used.

113. **doctis . . . dictis**: notice the play on words. The same phrase is found in Ennius, Plautus, and Vergil. Cf. note, l. 54.

114. Observe the strong *r* alliteration both initial and in the middle of the words.

ne . . . rearis: final as in l. 247: cf. *ne . . . reamur*, l. 78, though *ne* with 2nd pers. pres. subj. is occasionally prohibitive.

putes, l. 117, depends also on *ne* final.

religione: as in l. 86 first syllable long, see note to *recidere*, l. 280. For Lucretius' view of religion cf. i. 101 *tantum religio potuit suadere malorum.*

115. Half the line is connected by conjunctions, the other half is asyndetic: cf. ll. 68, 75, 438–9.

116. Lucretius, in maintaining the theories of Epicurus, combats the views of the Stoics, *vis animae divina regit hoc opus*, i.e. that the whole universe is a spiritual force: one part is active, the soul, a fiery ether which permeates everything, the other part is passive, the elements, earth and water (contrast ll. 140–5 below). The universe itself is a living force, God, whether he is Fire, Air, Spirit, Reason, Nature, Law, Destiny or Necessity, and all the gods of popular religion merely represent the various activities of the one God, such as Demeter, Dionysus, Athene; they are only popular conceptions of Zeus or the one God in his functions of giving mortals corn, wine, olives. Moreover, the human soul emanates from God, as the passive part of the universe proceeds from the active part, and it outlives the body. From what we have already seen in reading the foregoing 100 lines and from the Introduction Lucretius and the Epicureans looked upon these views as rank heresy, or rather as crass stupidity. The Stoics also explained the foolish or immoral stories of the gods found in the old poets as allegories, which were intended to convey some moral or physical truth, as in the next few lines all atheists or agnostics are put on a level with the Giants who tried to conquer Heaven and subdue the gods: they were punished for their impiety, a similar fate awaits the impious disturbers of religion.

ritu: with genit. common in verse and prose. Notice the alliteration of *p* in these two lines.

117–21 are a parenthesis: the argument is resumed, l. 122.

119. **disturbent . . . velint**: subj. as being subordinate clauses in oratio obliqua.

disturbent = *disturbare velint.* The Epicureans who deny the immortality of the world are condemned to the fate of the Giants in the opinion of the Stoics.

121. **notantes**, sc. *ignominia*: the official brand of ignominy affixed by the censor to a man's name. Lucretius means that the Stoics consider the language of the Epicureans in maintaining that the world must perish as an impious branding of immortal things with mortal speech and judgement.

122. **quae** takes up the argument again from l. 116.

usque adeo is to be taken with *procul* and repeated with *indigna.*

123. The order is *que* (*usque adeo*) *indigna videntur quae sint in numero deum*: cf. l. 51.

124. **notitiam**, 'a conception,' 'a general idea': notice the marked *p* alliteration.

125. **quid sit**: Munro, i.e. *quale sit illud quod est remotum*, 'of the character of things not endowed with . . .'

126. **quippe etenim**: a redundant expression characteristic of

Lucretius, both words meaning 'for'; it occurs several times in this book, ll. 240, 449, 1062, 1169. Cf. *etiam . . . quoque*, l. 153, and note, l. 245. *est*, 'it is possible,' but *esse*, 'to exist.' Observe (1) how Lucretius piles up his verbs *est, esse, posse, putetur*, and (2) how he arranges them to avoid having a number of dependent infinitives: *potest putari posse esse. non est ut putetur* = *non potest putari*: cf. l. 146 *non est ut possis* = *non potes*, but rather stronger, and *non erat ut fieri posset.*

127. **animi natura**: as in l. 59.

consilium: the result of *consulendi*, judgement.

128–41. Almost repeated from iii. 784–97.

129. **esse**, 'exist.' Lucretius' argument is that you must not expect to find heterogeneous elements in combination: you do not find clouds in the sea or blood in trees, nor will you find *natura consilumque animi* (or *animus* alone) *cum quovis corpore.*

quovis is emphatic, 'in any body whatsoever.'

131. **quicquid** = *quidque*: cf. ll. 264, 284, 304, 773, where it is used in each case with the partitive genitive.

crescat et insit: subj. of indirect question.

133. **longius**: as in MSS. many edd. change unnecessarily to *longiter*, both here and in iii. 676, 789 on analogy of *uniter, duriter.*

134. **quod si posset enim, multo prius ipsa**: Munro includes *posset* to *prius* in a bracket, 'for this would be much more likely to happen than that'; then he begins the apodosis at *soleret.* But taking the text as it stands, translate, 'But if it were possible, the force of the mind would far more be able . . . and would be wont to be born in . . . and after all abide in . . .' with *manere* depending on *soleret.*

137. **tandem**, 'after all,' a rare use. Munro quotes Plaut. *Mil. Glor.* 1062 *heu, ecastor, nimis vilest tandem.* 'Gracious, after all it's very cheap.'

vase: cf. iii. 555 *corpore quasi quod vas esse videtur*, and Cic. *Tusc.* i. 22, 52 *corpus quasi vas est, aut aliquod animi receptaculum.* Cf. Thess. I. iv. 4 'to possess his vessel in honour'.

138. **quod quoniam**, 'but since.'

constat certum = *certum est*; cf. ll. 144, 198, but rather more emphatic; cf. *exstent*, l. 477. The soul and mind not only exist in the body, but have their definite dwelling-place in the body.

139. **videtur**: lit. 'is seen', here passive, as in l. 149.

possit: indirect question.

140. **sorsum**, contracted for *seorsum*: see note, l. 447.

anima = ψυχή: soul, life)(*animus* = λόγος: rational principle, reason. See note, l. 116, on the Stoics' view.

141. **animalem**: adj. *animalis.*

142. **putribus**: crumbling.

igni: abl. for *igne*: as in l. 604; cf. l. 74 *orbi.* The Stoics believed that the stars were made of pure and divine fire.

143. **aetheris oris**: as in l. 85.

144. **constant** = *sunt*: cf. l. 199 *tanta stat praedita culpa.*

145. Duff: 'They have not even life, much less are they divine.'

vitaliter: ἅπαξ λεγόμενον.

146. **non est ut possis** = *non potes*: see note, l. 126.

147. **in mundi partibus**: Lucretius thought that the gods lived not 'in any parts of the world', but in the *intermundia* of Cicero, an exact translation of the Greek word μετακόσμια, the term used by Epicurus, signifying 'the spaces between the worlds' in the whole universe, where the Epicureans believed the gods lived a life of perfect bliss and repose free from every care: iii. 18 *sedesque quietae, quas neque concutiunt venti nec nubila nimbis aspergunt neque nix . . . cana cadens violat semperque innubilus aether integit, et large diffuso lumine rident.*

148. **tenvis**, 'fine,' 'impalpable,' so as to be almost incomprehensible, l. 149, and certainly intangible, ll. 150–2. *tenvis* is often scanned as a disyllable with the first syllable long.

149. **animi mente**, 'the reasoning power of the mind.'

videtur: as in l. 139. The Epicureans believed that though we cannot see the gods the gods are in the image of man, that their frame and blood is finer and superior, yet similar to our frame and blood.

deum natura is too *tenuis* to be comprehended.

150. **suffugit**: Munro notes this use of *fugio* and its compounds in the perfect in poetry (*metri gratia*) where the context requires the present, and quotes Verg. *Aen.* ii. 12 *horret luctuque refugit.*

151. sc. **natura deum**, as subject to *debet contingere* (= *tangere*).

nil quod nobis tactile sit (consecutive subj.).

153. The divine nature is so fine that we cannot touch it and it cannot touch us; it must therefore dwell in places too fine for our senses to apprehend. The only time we can get any conception of them is in our sleep.

sedibus: dative.

etiam . . . quoque, pleonastic: see note, l. 126.

154. **de**: Munro = *secundum*, 'after the model of.'

de = *de exemplo, de more* (as *ad* = *ad exemplum, ad normam*): for *tenues de exemplo corporis eorum.*

155. An unfulfilled promise, though he evidently attaches importance to it.

largo sermone: another indication that the poem was never completed.

156–65. A long but not complicated sentence: observe that *dicere* is subject to *desiperest* and that *voluisse, decere, fas esse* depend on *dicere*, while *adfingere, addere*, are in apposition to *dicere.*

sc. *deos* subject to *voluisse.*

158. **allaudabile**: only here and in Plautus; the reading is suspected. Notice *allaudabile laudare* in juxtaposition.

160. **sit**, subj.: as a subordinate clause in Oratio Obliqua.

ratione, 'design'; πρόνοια, as in l. 81.

161. **gentibus**: dat. of advantage.

fundatum perpetuo aevo = *fundatum perpetuum* (predi-

cative, 'to last for ever'), 'founded on foundations of everlasting time.' = *in perpetuum, in aeternum.*

162. **sollicitare** depends on *fas esse*, as do also *vexare, evertere*: notice the *v* alliteration.

163. **ab imo . . . summa**, Munro: 'Lucretius means *tota ab imo usque ad summa evertere.*' Hor. *Sat.* ii. 3. 308 *ab imo ad summum.*

164. **de genere hoc**: as in l. 37. For the construction of the verbs see note, l. 156. For the vocative see note, l. 8.

165. Notice the halting, unrhythmical sound of this line.

166. **queat**: deliberative question: notice the archaic form *largirier.* Cf. l. 51.

emolumenti: partitive genitive.

167. **aggrediantur**: with infin., as in l. 110.

168. **novi**: for construction cf. *emolumenti*, l. 166.

ante (adv. = *antea*), as the rhythm shows, goes with *quietos*, while *tanto post* is to be taken with *potuit inlicere*, or possibly with *ut cuperent*: 'could at so late a date have induced them hitherto at rest . . .'

170–1. **is** understood is subject to *videtur.*

171. **nil aegri**: partitive genit.

172. **anteacto**: contracted into a trisyllable; cf. *antehac*, l. 338.

173. **tali**: probably the dative of the person concerned. The gods were absolutely happy before this, nothing could increase their happiness; therefore what whim could induce them to change a life of bliss and repose for the life of anxiety that their self-ordained task of the creation of man would impose upon them? It is unthinkable.

174. **credo**, ironical: Munro suggests *crepera*, 'dim', 'wavering', or 'uncertain'.

vita: sc. *deorum.*

175. **rerum genitalis origo**, 'the first dawn of the birth-time of the world': so again l. 324.

176. For the sentiment cf. Soph. *O. C.* μὴ φῦναι τὸν ἅπαντα νικᾷ λόγον· τὸ δ' ἐπεὶ φανῇ βῆναι κεῖθεν ὅθεν περ ἥκει πολὺ δεύτερον ὡς τάχιστα. Aesch. *Fr.* 384 τὸ μὴ γενέσθαι δ' ἐστὶν ἢ πεφυκέναι κρεῖσσον κακῶς πάσχοντα, and Cic. *Tusc.* i. 48. 115 *non nasci homini longe optimum est, proximum autem quam primum mori.* Cf. ll. 226–7.

creatis: dative after *esse*, agreeing with *nobis*, but cf. l. 180.

177. Order for translation is *enim quicumque est natus debet . . .*

179–80. Cf. Cic. *Tusc.* i. 93 *nondum gustaverat, inquit, vitae suavitatem.* This seems to come very close to the doctrine of the Stoics that suicide was permissible, nay advisable, when the evils of life more than counterbalanced its pleasures.

180. **in numero vitae**: i.e. *viventium*, 'on the lists (or the roll) of the living.'

obest . . . creatum: sc. *ei.*

creatum might have been in the dative, as in l. 176.

181. **gignundis**: the archaic form of the gerundive, see note, l. 66. Bring *unde* to the beginning of this sentence.

exemplum, 'pattern', 'model'.

182. **notities**: cf. l. 1047 *unde insita notities est . . . quid vellet facere ut sciret animoque videret*? This is a poetical though not strictly accurate translation of the term πρόληψις used by Epicurus to signify preconception based on knowledge gained from former experiences: see the Introduction, Philosophy of Epicurus (*anticipatio* or *praenotio* is the more accurate equivalent used by prose writers). Mankind can have an idea or conception (πρόληψις) of the gods, because the gods have existed from everlasting; on the other hand the gods could have no conception of mankind, no pattern (*exemplum*), to imitate, because, as Duff says: 'if no men existed there could be no (εἴδωλα, *simulacra*) images of them and consequently no (πρόληψις) conception of what they were like.'

183. **vellent**, indirect question; this sentence depends on *scirent . . . viderent*, which are consecutive subj.

184. **principiorum**: *metri gratia* in Lucretius for *primordiorum*; cf. ll. 39, 671; *primordia* or *primordia rerum* ll. 187, 419, 437 are the ἀρχαί, or ἀρχαὶ τῶν ὄντων of Epicurus, the atoms practically = *elementa* (στοιχεῖα) the ultimate and indivisible elements of matter: they are solid and contain no void (τὸ κενόν, *inane*): they differ in weight, size, and shape (cf. l. 440), and are unlimited in number and ever moving, either downwards by their own weight (*pondus*), or sideways or upwards by chance collision (*plaga*, l. 363 and ll. 436–9) with other atoms, and it is this incessant movement and chance collisions of atoms that formed the world: Verg. *Ecl.* vi. 31 *magnum per inane coacta semina*. This is practically the modern atomic theory.

185. **quid . . . possent**: as in l. 87. Construction is subj. of indirect question acting as second subject to *cognita*, and parallel to the subst. *vis*.

186. **natura**: see notes to ll. 77 and 107, which prove how the Epicureans identified nature (*natura*) with chance (*fortuna*). Cf. l. 1361 *specimen rationis . . . ipsa fuit rerum primum natura creatrix*.

187. Notice the *m* alliteration.

multa is used adverbially, and is not to be taken with *primordia*: ll. 187–91 are repeated ll. 422–6.

188. **plagis . . . ponderibus**: see note, l. 184, where the formation of things is shown to be due to the collision (*plagis*) and the downward movement caused by the weight (*ponderibus*) of the atoms.

189. **consuerunt**: trisyllable, as in ll. 661, 702. See note, l. 53.

190. **omnimodis**: as in ll. 718, 1024 formed on the false analogy of *multimodis* (*multi' modis*) *mirimodis* (*miri' modis*): so this should be *omnibumodis*. Observe the halting rhythm and the heavy spondaic quadrisyllable ending the line.

191. **possent**: indirect question.

quaecumque is the object.

congressa in agreement with *primordia*, the subject.

192. **disposituras**: only in Lucretius, 'arrangements'; *metri*

gratia for *dispositio* cf. ll. 39, 184; take *quoque* with *talis* in following line.

193. **decidĕrunt**: notice the scansion.

194. **qualibus**: abl. of origin, 'out of which this sum of matter (i.e. the world) is carried on by constant renewal.'

summa rerum: as in l. 237, the world)(*summarum summa*, l. 361 = *summam summai totius omnem*, vi. 679 'the sum of sums', 'the entire universe': l. 330, *summa*, alone, 'our world.'

195. **si iam**: with pres. subj. as a rule means granting for the moment some supposition for the sake of argument. We have *ut iam* in Cicero, *iam ut* in Livy and Caesar with a similar meaning. Here it implies, of course, that Lucretius was not ignorant of the nature of atoms.

sint: subj. of indirect question; ll. 195–9 occur in ii. 177–81.

196. **ex . . . rationibus**, 'judging from the arrangements' or 'design'.

ausim: an archaism for *audeam*; cf. l. 730, *ausis*: perhaps it is an old optative; cf. *duim* (δοίην), *edim*, *velim*, *sim* (*s-ie-m* ἐσ-ιε-μ), note, l. 531.

197. **reddere**, for *rationem reddere* often in Lucretius: so i. 566 *possit reddi* = *ratio possit reddi*. Cic. *Tusc.* i. 70 uses *adferre* for *rationem adferre*.

198. **nobis**: dative of person concerned.

199. **stat**: see note to l. 144: it is a little more than *est*.

200. **caeli** depends on *impetus*, 'whirling expanse.'

impetus has a two-fold meaning, (1) force, vehemence, referring to the revolution of the sky: l. 510 *magnus caeli si vertitur orbis*; (2) size, a secondary meaning derived from the former.

principio: answered by *inde*, 204.

201. **inde** = *a tanto*.

silvae ferarum: *ferarum* is practically an epithet, a genitive of quality; cf. l. 369 *cladem pericli* (if that reading is correct).

202. **vastae**, 'waste' or 'wasteful': as taking up so much space without producing anything in return.

204. **inde porro**, 'secondly,' a pleonastic expression. *duas partes*, Munro τὰ δύο μέρη, i.e. two-thirds are useless and unproductive from being in the torrid or frigid zones: the habitable zones being the temperate.

205. **geli**: this form of the genit. is common in Lucretius; he also has *gelum* acc.

casus: the frost falling from the sky, instead of rising rather from the earth.

206. **arvi**: partitive genit., 'land fit for tilling and cultivation.'

207. **ni vis . . .** Cf. Verg. *Georg.* i. 198 *ni vis humana quotannis* . . . much of this passage is closely imitated in the second *Georgic*.

208. **vitai**: archaic genit.: see ll. 28, 67, 211.

bidenti: a heavy two-pronged hoe.

209. **pressis . . . aratris**: so as to drive a deep furrow.

211. **terrai**: archaic genit.: as in l. 235. Cf. l. 208.

cimus from *cire*, the usual form is *ciere*: see L. & S. *cieo* init.

Duff: 'As object to *cimus* and subject to *nequeant* (next line) some word like *fruges* must be understood', or it must be taken out of *quaesita*, l. 213.

ad ortus: i.e. *ad oriendum*, 'to spring up' as young blades of wheat, &c.

212. **nequeant**: an irregular conditional sentence; cf. ll. 277–8. Munro quotes a number of cases in Lucretius and calls it potential.

213. **quaesita**: the produce of the labour that has been won.

et tamen: as in l. 768, 'and yet after all,' putting other considerations out of the way.

217. Notice the alliteration of the initial *v* and the internal *t*.

220. Large tracts of country in Italy are very dangerous even to the acclimatized Italians, owing to the malarial fevers arising from the mists and swampy undrained ground.

222. **ab undis**: as if *undis* were a living agent; cf. l. 306 *ab aevo*.

223. Notice the alliteration.

infans with its original meaning of 'speechless': so *infantia*, l. 1031. Hor. *Sat.* ii. 5. 40 *infantes statuas*, 'statues that cannot speak.'

indigus: elsewhere with the genit. though *indigeo* takes the abl. as well.

224. **vitali auxilio**, 'furtherance for life.'

oras: as in l. 85.

226–7. Cf. for the sentiment note on l. 176.

227. **cui . . . restet**: causal subj.

malorum: partitive genit.

228. Munro: 'So that instead of things being made *hominum causa* above all, they are less favoured than other creatures, to whom nature is far more bountiful.'

229. **crepitacillis**. Duff cites Martial xiv. 54 on the *crepitacillum*: *si quis plorator collo tibi vernula pendet, haec quatiat tenera garrula sistra manu.* Lucretius seems to ignore the probable state of primitive man and the progress of civilization.

cuiquam: referring, of course, to animals.

230. 'The fond, broken accents (i.e. baby-language) of the fostering nurse.' Duff: *almae*, 'the word being derived from *alere*.' Lucretius used *almus* with *cibus*, *liquor aquarum*, then *nutrix*, and finally with goddesses *Venus* and *Pallas*.

231. **pro tempore caeli**, 'to suit the season'; the coats of animals naturally grow thick and thin in winter and summer.

233. **quis**: the old ablative plural form of *qui*; cf. old abl. sing. *qui* = *quo*. MSS. have *qui*, the old abl. = *quo*, 'wherewith,' often used with a plural antecedent; cf. iv. 615 *qui sentimus sucum, lingua atque palatum*: so in Plaut. *Aul.* 502 *vehicla qui vehar. Capt.* 1003 *coturnices dantur quicum lusitent.* If, however, *quis* is corrected it is easy to see how the final *s* would drop out before the initial *s* of *sua*.

tutentur: final subj.

quando: causal = *quoniam* or *quandoquidem*. Lucretius uses

it more often in this sense than in the temporal sense: it is also used in the same way by the older writers.

234. **daedala rerum**, 'manifold' or 'cunning in works': cf. note, l. 96; here in an active sense; cf. iv. 551 *verborum daedala*, but l. 1451 *daedala signa* in a passive sense.

235. We have now reached the end of the long digression 110–234.

principio refers to l. 109.

terrai: as in l. 211. Notice the periphrasis *terrai corpus*; cf. ll. 59, 69.

236. **animae**: as we talk of a light breath of air.

calidi: a stock, but rather unnecessary, epithet with *vapores*; a characteristic pleonasm in Lucretius: cf. l. 605 *calidis fervoribus*.

237. **rerum summa**: as in l. 194, 'this world of ours.'

videtur: passive.

238. **nativo ac mortali**, 'that has had birth and will have death': see note, l. 60. So again, ll. 241–3.

239. **eodem**: sc. *corpore constare*.

mundi natura = *mundus*: see note, l. 59.

240. **quippe etenim**: as in l. 126.

242. **ferme**, 'as a general rule.'

243. **maxima**, 'chief.'

244. **regigni**: ἅπαξ λεγόμενον.

245. **quoque item**: redundant. Lucretius has *quoque etiam*, *etiam quoque*, *quoque item*, *item quoque*, l. 751; cf. too *quippe etenim*. Cf. l. 494.

246. **principiale**: peculiar to Lucretius, 'of first beginnings,' therefore there will be an end; both *caelum* and *terra* are *nativus*, and consequently must be *mortalis*.

247. **ne . . . rearis**: final as in l. 114.

illud corripuisse me mihi, 'I have filched for myself surreptitiously,' i. e. 'unfairly assumed without proof': cf. *arripere* in Cicero, συναρπάζειν and προαρπάζειν in Greek, to be guilty of a *petitio principii*.

249. **dubitavi . . . perire**: *dubito*, 'doubt,' rare with infin. for *quin* with subj.

250. **rursus**: should be taken with both infin.

251. **terrai**: as in l. 235.

principio = πρῶτον μέν, answered by **quod superest** = ἔπειτα (l. 261).

252. **multa**: transference of epithet for *multorum* with *pedum*.

vi = *numero*. Cf. Irish expression, 'a power of things.'

254. **aere**: abl. of place, 'over the whole air.' Cf. l. 398 and l. 1166 *toto orbi*.

255. **ad diluviem revocatur**, 'is washed away': lit. 'is reduced to washing away' by the process of denudation; similarly in vi. 292 *ad diluviem revocari*. So too l. 1141 *res ad faecem redibat*.

256. Notice the *r* alliteration.

257. **pro parte sua**, 'in its turn': Duff = ἐν μέρει.

quodcumque: the subject.

alid: the object.

alid: archaic for *aliud*: as in ll. 1305, 1456.

258. **redditur**, (1) 'is put back', i. e. is ultimately replaced somewhere; (2) 'is replenished', 'has restitution made to it': the use of the word is here almost like the Greek middle voice. For the sentiment cf. ll. 322–3.

procul dubio: as in iii. 638 = *sine dubio*.

videtur, 'is found,' passive.

259. **omniparens**: subst. 'all-mother earth'; take *eadem* predicatively, 'at the same time.' For the sentiment Munro quotes Orell. *Inscr. mater genuit, mater recepit.* Eurip. *Ant.* fr. 195 ἅπαντα τίκτει χθὼν πάλιν τε λαμβάνει. Shakespeare, *Romeo* and *Juliet*, II. iii:

> The earth that's nature's mother is her tomb:
> What is her burying grave, that is her womb.

260. **tibi**: ethic dative. So too in l. 294 and *nobis* l. 1209.

libatur, lit. 'has something (a taste) taken from it', and consequently 'is lessened': cf. l. 568.

261. **quod superest**: see l. 251. Notice the asyndeton. When all the subst. contain the same idea, the harshness of the asyndeton is not so marked.

262. **latices**: probably subject to *manare*. Duff suggests that it may be internal accus. See L. & S. *mano* I. A. β.

263. **nil opus est verbis**: sc. *declarare* from *declarat* in the next line.

264. **aquai**: partitive genit., archaic form.

quicquid for *quicque*: see l. 131. The phrase = τὸ ἀεὶ πρῶτον ὕδωρ: cf. ll. 284, 304; each part successively, one after another. Cf. l. 291.

265. **tollitur . . .**, 'is taken off and so, on the whole, there is no overflow.'

nil: adv. acc.

266. Strong *v* alliteration.

verrentes . . . sol: recurs ll. 388–9.

267. **retexens**, 'decomposing': lit. 'undoing its fabric.'

268. Notice the juxtaposition of preposition and adverb.

269–72. Almost as in vi. 635–8.

virus: the strong, undrinkable brine of the sea.

remanat: peculiar to Lucretius.

270. **materies**. Lucretius has also *avarities*, *notities*, *amicitiem*.

271. **dulci**: sweet, fresh water, without the nauseating taste of the briny sea water.

agmine: so too of streams in Ennius and Vergil. Cf. Milton, *Paradise Lost*, vii. 305

'Where rivers now Stream and perpetual draw their humid train.'

272. **via secta semel**, 'a channel once scooped.'

pede: of a stream. So Hor. *Epod.* xvi. 48 *levis crepante lympha desilit pede.* Verg. *Cul.* 17 *liquido pede labitur unda.* Duff: 'We speak of a stream running, but we can hardly speak of its "foot", though Jeremy Taylor could.'

273. **corpore toto**: abl. of part concerned.

corpus: the whole body or volume of air.

274. **privas** = *singulas*: cf. l. 733 *in dies privos*. See L. & S. *privus* init.

275. **quodcumque fluit . . .**: according to Epicurus every sensation, every mental expression, is the result of touch or modified touch. Exact images or fine films (*simulacra*, εἴδωλα) are thrown off from the surface of solid objects (στερέμνια) and are perceived by the soul-atoms in the bodily organs or by the mind itself. These films move infinitely fast and incessantly flow off from bodies, yet the bodies only diminish slowly, so fine are they. A mixture of these films makes us believe we see centaurs, chimaeras, sirens, sea-serpents, &c.

276. **aeris . . . mare**: so Enn. *Trag.* vi *caeli fretum*. Shakespeare, *Timon* iv. 2. 21 'We must all part Into this sea of air'.

277. **retribuat . . . recreet . . . forent**, an irregular conditional sentence; we would expect imperf. subj. in both clauses: cf. note, l. 212. So Verg. *Georg.* iv. 116 *ni traham et . . . festinem . . . canerem*.

fluentis agrees with *res*: acc. plur.

279. **cessat**: sc. *aer* as subject.

280. **recidere**: first syllable long. Cf. *rēligio*, ll. 86, 114, *rēducere*, l. 1337, *rēducit Venus aut rēductum*, i. 228 and iv. 992.

fluere, 'ebb,' 'diminish': both the εἴδωλα and the στερέμνια, the fine images and the solid bodies which throw them off; cf. l. 275.

281. Notice the liquid *l* alliteration.

liquidi, 'clear-streaming.'

fons luminis: so l. 293 *lucis caput*. Milton, *Paradise Lost*, vii. 364 'Hither, as to their fountain, other stars Repairing in their golden urns draw light'.

282. Cf. l. 293.

irrigat, 'floods': see note on l. 594.

284. **primum quicquid fulgoris**. Duff: = τὸ ἀεὶ πρῶτον φῶς. Cf. ll. 131, 264.

ei: dat. of disadvantage, refers to the sun.

285. **quocumque accidit**, 'wherever it falls.'

licet cognoscere possis, as Duff says, pleonastic for either *licet cognoscas* or *potes cognoscere*: cf. ll. 494, 560.

286. **succedere**: in the original sense of passing below.

287. **inter quasi rumpere**: tmesis, common in Lucretius as in all early poets, especially in Greek. Cf. ll. 289, 299, 566, 583, 634, 883, 1128, 1268, 1374. So Ennius *cere comminuit brum*. Butler, *Hudibras*, pt. I, c. 1. 328 'that old Pyg- (what d'ye call him) malion'. Hooker, *Eccl. Polit.* v 'creatures of what kind soever'. Lucretius uses it generally in separating prepositions from their verbs, though occasionally he divides up substantives *ordia prima*, iv. 32, for *primordia*; for the inverted tmesis compare also *facit are* for *arefacit* vi. 962.

289. **qua . . . cumque**: tmesis. Cf. preceding note and l. 566.

291. **primum iactum fulgoris quemque**: almost as in l. 284.

292. **ratione**, 'method.'
videri: passive.
in sole, 'in the sunlight.'
293. Cf. ll. 282–3.
lucis caput: as *fons luminis*, l. 281. Cf. l. 601 *capite*.
294. **tibi**: ethic dat.: see l. 260.
295. **pendentes lychni**: lamps hanging from the ceiling. Some edd. read *lychini* (λύχνοι), on analogy of the old forms. Enn. *lūcīnorum*, *dracuma* (δραχμή), *tecina* (τέχνη). Cf. *Aesculapius*, *Alcumena*, Ἀσκληπιός, Ἀλκμήνη, from the dislike of the old Latins to certain combinations of consonants.
clarae . . . pendentes: for the omission of the copula see note, l. 13.
296. The pine torches would produce a thick, resinous, smoky light.
multa caligine, 'amid great darkness': abl. of attendant circumstances.
297. **ardore ministro**, 'by their fostering heat.'
298. **tremere instant**: *instare* is also used with *ut*.
instant, instant: epanalepsis or repetition; cf. l. 950–1 *umida saxa, umida saxa*; ii. 955 *vincere saepe, vincere*; iii. 12 *aurea dicta, aurea*. Cic. *Arat. prog. vocibus instat, vocibus instat.*
299. **inter quasi rupta**: tmesis as in l. 287.
interrupta: to be taken with *lux*.
300–1. An involved sentence. The order is *usque adeo properanter exitium ei* (dat. of disadvantage, = *exitium lucis*) *celatur celeri origine* (abl. of cause) *flammae ab omnibus ignibus*. Though light is continually dying out, the incessant radiation of newly born light conceals the destruction of the old light.
303. **ex alio . . .** 'from fresh and ever fresh supplies.'
subortu: ἅπαξ λεγόμενον.
304. **primum quicquid flammarum**: τὸ ἀεὶ πρῶτον φῶς. Notes, ll. 131, 264.
305. **ne credas**: of course final.
306. **ab aevo**: abl. of the agent, time is personified; cf. l. 222. The following infinitives depend on *cernis*.
309. **fati protollere finis**, 'to advance,' so 'defer the bounds set by fate'.
312. **proporro**: peculiar to Lucretius and Lucilius; lit. 'further in turn', 'as well.'
This line is corrupt as it stands: for *cumque* Munro suggested first *aeraque . . . solidumque . . . ferrum*, but later he changed *cumque* to *sēnĕ*, as being likely to have dropped out before *senescere*, 'ask for themselves whether you would believe that they grow old and decay.' It is very ingenious, but not convincing. The passage is probably hopelessly corrupt.
313. **non**: sc. *videmus*.
314. Notice the *p* and *v* alliteration. For the repetition on *perferre patique* see note, l. 5.
315. **finiti**: if they cannot bear the wasting influence of finite time, surely they cannot have existed for infinite ages past. They

are *mortalia*, they have an end and are doomed to perish, so they must be *nativa*, they must have had a beginning, therefore they are not immortal. Cf. note, l. 376.

316. **pertolerassent**: ἅπαξ λεγόμ., unless there is a case in Attius.

quae = *si ea*.

317. **tormenta aetatis**. Duff very happily compares Shakespeare, *Sonnet* 65 'The wrackful siege of battering days'.

privata fragore = *sine fragore*: cf. ll. 840–1 *orba pedum, manuum viduata . . . sine ore . . . sine vultu*; cf. l. 357 *plagarum expertia*.

318. **tuĕre, here**: *tuēre*, l. 92.

hoc: the all-embracing ether.

319. **si procreat . . .**: ironical.

320. **quidam**: as Pacuvius (from whom, Munro says, this passage is paraphrased) and the Stoics.

321. **corpore**: abl. of material.

322. Cf. ll. 257–8.

323. Therefore being subject to decrease and increase ether must be mortal. The line is much compressed for *debet deminui alendo et augendo, debet recreari cum recipit res*.

324. **genitalis origo**: as in l. 175, 'the first birth-time.'

325. **aeterna**, 'from everlasting.'

326. **supera**: as in l. 85; for *supra*, 'beyond,' 'further back than.'

bellum Thebanum: there was a lost epic, the Thebaid, describing an expedition against Thebes, like the Iliad describing an expedition against Ilium.

funera, 'destruction': *funus* is used in the singular in this sense by classical prose writers.

327–8. Notice the jingle, **cecinere, cecidere**, in exactly the same place in each line.

cecidere, 'vanished.'

330. **summa** = *haec rerum summa* = *mundus*, 'our world.' See note, l. 194.

331. **natura mundi** = *mundus*: cf. l. 59 and note.

exordia cepit: as in i. 149 *exordia sumet*: the metaphor is taken from beginning a web.

332. **etiam . . . nunc**: to be taken together as l. 17. Next line we find the position of the two words reversed.

nunc etiam: as in l. 20.

334. **organici**: here a subst., 'musicians,' as in ii. 412 *musaea mele, per chordas organici quae . . . figurant*.

melicos: direct from the Greek μελικός.

335. Possibly to be taken as a hendiadys.

336. **nuper**. Duff remarks, 'Epicurus was born in Samos in 341 B.C. three hundred years before Lucretius wrote.'

primus cum primis: emphatic. Cf. l. 59 *in primis primum*.

337. **possim**: consecutive subj.

338. **antehac**: contracted into a disyllable; cf. *anteacto*, l. 172.

340. **vexamine**, 'upheaval': ἅπαξ λεγόμενον.

341. **ex**, 'as a result of', 'after'.

342. **coperuisse**: contracted form for *cooperuisse*, *metri gratia*: cf. vi. 1068 *colescere* for *coalescere*.

343. **tanto quique magis**, 'so much the more.' *quique* is the abl. of *quisque*. Duff quotes Livy iii. 40 *dilectum primo quoque tempore haberi*, 'at the first possible opportunity.' Like the human body the earth is subject to terrible diseases or attacks, and like the human body it will some day perish owing to the severity of the scourge.

346. **ibi**, 'at that time', 'in that particular instance'.

347. **darent**: for the plqpf. *dedissent* which we should naturally expect. *darent* for *facerent*; cf. ll. 104, 421, 442 and l. 1340 *fera facta dedere*.

348. **videmur**: passive, 'we are proved to one another.'

349. **inter nos**: mankind as opposed to inanimate creation.

350. **atque**, 'as.'

illi: sc. *aegrescebant*.

351. **necessust**: this form is found frequently in Lucretius, Munro hesitates between reading *necessumst* and supposing a nominative *necessu*. Terence has *necessus fuit*. Lucretius has *necessis* genit. of *necesse* vi. 815. See note, ll. 56–7.

352. **cum**, 'endowed with'; so in ll. 364, 864 *fido cum pectore corda*, l. 904 *triplici cum corpore*. *cum* has the same force as the simple abl.

respuere ictus, 'to repel blows.' So Pliny, *N. H.* xxxvii. 57, of diamonds resisting blows,' *respuentes ictus*.

353. **sibi**: dat. of part affected.

queat: consecutive subj.

354. **intus**: properly, as Duff says, of rest within a place)(*intro* of motion into.

materiai: archaic genit.; see note, l. 67.

materiai corpora, 'bodies of matter', 'atoms'; which with *inane* (τὸ κενόν), l. 357, 'void,' make up the universe. See Introduction: The Philosophy of Epicurus. Munro gives as synonyms, *spatium*, l. 370, *vacuum spatium*, *locus*, *locus ac spatium*.

ante: adverb, i. e. in the first two books of this poem.

356. **posse** depends on *necessust*, l. 351.

durare: as in ll. 57, 61 *posse incolumis magnum durare per aevum*.

357. **plagarum expertia** = *sine plagis*; see note, l. 317.

inane: see note, l. 354. Duff: 'Void is exempt from blows because it is too impalpable to be affected by them.'

358. **neque ... fungitur hilum**, 'and suffers not a jot'; lit. 'is acted upon' = πάσχειν: so i. 440. **faciet quid** = ποιήσει τι.

hilum: used adverbially; cf. note, l. 588. Festus explains *hilum putant esse quod grano fabae adhaeret, ex quo nihil et nihilum*. In l. 1409 we have the abl. *hilo*. Lucretius has also *perhilum*, 'very little,' vi. 576; ἅπαξ λεγόμενον.

359. **fit** (= *est*). **copia**, 'there is extent of room.'

circum: adverb.

360. **quo possint**: final subj. = *ut in eum locum . . .*

quasi: to apologize for the peculiarity of the idea, 'so to say'; cf. notes, ll. 496, 778. Notice the alliteration of *d*, and in the next line of *s*.

dissoluique: five-syllabled ending.

361. **sicut**, 'in this way.'

summarum summa, 'the entire universe'; see note, l. 194.

362. **qui**: for *aliqui*, or in more usual writing *ullus*, *quisquam*.

dissiliant: final subj.

363. **possint**: consecutive subj.

plaga: the blow or collision of the moving atoms; see note, l. 184.

364. Duff: 'But for void, all motion would be impossible: the presence of void is necessary to explain difference in weight between bodies equal in bulk.'

solido cum corpore: see note, l. 352.

uti docui: i.e. in i. 329 foll., esp. l. 330 *namque est in rebus inane*.

366. **ut**, 'as', 'like'.

367. **possint**: consecutive subj.

coorta, 'rise in mass.'

368. **corruere**: active, rare in this sense, but cf. l. 1325 *terram . . . fronte ruebant*.

hanc rerum summam, 'this world of ours,')(l. 361 *summarum summa*, 'the entire universe.'

369. **per ictus**: emendation for *pericli*, MS. reading. If *pericli* is retained, *cladem pericli* = 'perilous disaster': the genit. of quality acting as an epithet: cf. l. 201 *silvaeque ferarum*; note ll. 764, 1193 *murmura magna minarum*. See note, l. 201; Catull. xxiii. 11 *non casus alios periculorum*; Aesch. *Pers.* 436 συμφορὰ πάθους.

370. **natura loci**: periphrasis for *locus*; see note, l. 59.

spatium = *inane*: see note, l. 354.

profundi: subst. 'the space of deep void'; 'boundless', for limitless void enfolds the universe.

371. **possint**: final subj.

moenia mundi: so i. 73 *flammantia moenia mundi*, the fiery orb of ether that walls in the outer circle of the world. See ll. 457–70. Cf. Milton, *Paradise Lost*, iii. 721 'The rest in circuit walls this universe'.

372. Notice the *p* alliteration.

373. **haud praeclusa . . . caelo**, 'not closed to death'; i.e. the sky, earth, sun, sea, all will perish. Datives of disadvantage.

375. **immane**: adj. used adverbially, unless the MS. reading *immani* is retained: in which case *immani* is to be taken with *hiatu*. Cf. Verg. *Aen.* vi. 237 *vastoque immanis hiatu*. **respectat** 'looks towards'; cf. vi. 1234 *funera respectans*.

376. What is *mortalis* must be also *nativus*, things that have an end must have a beginning, things which perish cannot have existed from infinite time past. Cf. note, l. 315.

379. This line is repeated in l. 1217. Notice the *v* alliteration.

380. **cum**: causal.

cum maxima mundi membra, 'the sovereign members . . .' Notice the alliteration of six *m*'s. The sovereign members are fire and water which are always at strife, each endeavouring to gain the mastery over the other; witness the old legends of the poets.

381. **pio nequaquam** = *impio*: especially of civil war. Livy i. 32. 12 *puro pioque duello*, not a civil war.

382. **nonne vides**: rather late in the sentence for a question to be introduced.

aliquam: *finem* is here feminine: so in ll. 826, 1213, 1432; it is usually masc. though ante- and post-classical writers and poets use it in the feminine. There is only one instance of the plural with a feminine adj. Varro, *L. L.* v. 1. 13.

ollis: the archaic form of *illis*; so too in ll. 1291, 1390.

383. **vel cum** should be answered by another *vel*, but in l. 386 Lucretius changes the construction and there is an anacoluthon. It is met with occasionally in all the best Greek and Latin writers. Cf. note, ll. 447, 460, 851–3 *ut sint . . . habere*.

384. **exsuperarint**: for *exsuperaverint*: fut. perf. because *cum* is purely temporal. This is to take place by evaporation.

385. **facere intendunt**: the infin. after *intendo* is rare: it is poetical, and not in the best prose-writers.

neque adhuc: Duff = *sed nondum*. Other editors emend *patrantur* to *patrarunt*.

386. The anacoluthon begins with this line: we should expect *vel cum*.

tantum: acc. after *suppeditant*, sc. *aquae*.

ultra: adverb, 'besides.'

387. **diluviare**: ἅπαξ λεγόμενον. *minor* is occasionally followed by the pres. instead of the fut. infin. See L. & S. *minor* II. A. δ. Cf. *confidunt posse*, l. 390.

388–9. These lines are repeated from 266–7, practically word for word.

390. **confidunt posse**: see l. 387 and note.

omnia: object to *siccare*.

391. **possit**: in Lucretius *prius quam*, *ante quam* take the subj. unless the *quam* clause precedes *ante* iii. 973 *quam nascimur ante*, or *prius* vi. 979 *quam adgredior . . . prius*. Munro gives various instances at iii. 973. 'Before water can attain the end of its endeavour.'

392. **aequo** = *ancipiti*, 'undecided.'

certamine . . . cernere certant, 'strive to decide. . . .' *cerno* = *decerno*, in a different sense in l. 782. Observe the assonance.

394. **cum**: concessive.

interea, 'by the way.' Cf. note, l. 83.

superantior, 'predominant': ἅπαξ λεγόμενον.

fuerit: subj. as *regnarit* in next line.

396. **superavit et ardens**: emendation for *superavit et ambens*, other edd. read *superāt et lambens*, contracted perfect. Cf. i. 70 *inritāt animi*, vi. 587 *disturbāt urbis*.

397. **avia**, 'dashing wildly from the course'; ἔξω δρόμου, with *vis*.

rapax = *praeceps*: cf. L. & S. *rapio* II. Notice *rapax*, *raptavit*.

398. **aethere toto**: abl. of place where. Cf. l. 254 and note.

400. **magnanimum**: Duff, 'aspiring,' perhaps sarcastic.

repenti: here only in the oblique case; *repentinus* is generally used for cases other than the nominative.

401. **deturbavit equis**, 'dashed, hurled down from his horses.'

cadenti obvius, 'meeting him as he fell.'

402. **aeternam lampada**: as Duff says, Lucretius is trying to prove the sun is not eternal. Consequently the epithet must be considered to be a stock one. Cf. l. 514 *aeterni sidera mundi*. See note, l. 476.

succepit, 'caught from him'; i. e. in turn, almost = Greek διάδοχος.

403. **redegit**, 'got in hand.' Ov. *Met.* ii. 398 *colligit amentes et adhuc terrore paventes Phoebus equos.*

404. *suum per iter gubernans, cuncta recreavit* is the order.

suum does not refer to the subject of the sentence *sol*, but is rather equivalent to *proprium*. Cf. Verg. *Aen.* vi. 232 *Aeneas . . . imponit suaque arma viro* (i. e. *arma Miseni*) or Verg. *Aen.* vi. 152 *sedibus hunc refer ante suis et conde sepulcro*; Ov. *Fast.* ii. 678 *clamato 'suus est hic ager, ille tuus'*.

405. **scilicet**: ironical; for *scire licet* rather than *sci* (imperative) *licet*. See Lindsay's *Short Historical Latin Grammar*, p. 124. Its meaning is equivalent to δηλονότι, 'you must know.'

Graium: for *Graiorum*.

406. Translate, 'which is all too widely at variance with. . . .'

repulsum = *remotum*.

407. **materiai**: as in l. 354; see note, l. 67.

408. **plura**, 'more than usual.'

409. **inde** = *deinde*, 'and then.'

revictae, 'vanquished in turn in some way or other.'

410. **torrentibus**, 'the glowing air.'

aut, 'or else.'

411. **coortus**, 'gathering itself together.' Joshua iii. 16 'the waters stood and rose up upon an heap'; Psalm lxxviii. 14 'He made the waters to stand on an heap'.

412. **ut fama est**: as l. 405 *ut veteres Graium cecinere poetae*.

quando: temporal, not interrogative, in the days of Deucalion.

413. After **ubi vis** take l. 414, then **aliqua . . . recessit**.

aversa recessit, 'was turned aside and withdrew.'

415. **constitĕrunt**: cf. *fuĕrunt*, l. 474: the meaning is as in Old Testament, Genesis viii. 3 'the waters were abated'.

416–18. These lines are very similar to ll. 68–9, *q. v.* for notes.

417. **profunda**: subst., 'depths'; it also means rarely 'the heights'.

fundarit: subj. of indirect question after *ponam*.

418. **ponam** = *expediam*, l. 113.

ex ordine, 'next in order.'

419–22. Repeated i. 1021–4. Notice the three abl. together.

consilio, 'by design.'

ordine suo, 'in its right place.'

sagaci mente, 'by keen intelligence.'

consilio. The whole gist of the Epicurean theory is that the concourse of atoms was merely a fortuitous collision; there was no design or plan in their combining together.

420. **suo**: contracted and scanned as a monosyllable. Cf. iii. 1025 *sis oculis*. See L. & S. *suus* init.

421. **darent**: indirect deliberative question. For *darent* = *facerent* see note to l. 347. Cf. l. 442.

422–6. Repeated from ll. 187–91.

427. **vulgata**, with *primordia*, 'spread abroad.'

428. **omne genus**: accus. used adverbially. Lucretius is very fond of the phrase (it recurs l. 437) and it is common in the best writers. He has also *quod genus*, ll. 478, 608; *hoc genus*, *id genus*.

coetus, motus: direct accus., governed by *experiundo*. Notice the archaic form of the gerund. See note, l. 66. This line occurs in i. 1026.

429–31. These lines are similar to ii. 1061–3.

ea. Duff: 'The subject, which has previously been atoms generally, is suddenly restricted to a particular concourse of them.'

430. **exordia**, 'rudiments,' the rudimentary formations of earth, sea, and sky. Cf. Verg. *Ecl.* vi. 33 *ut his exordia primis omnia et ipse tener mundi concreverit orbis*.

saepe. Because, in the boundless universe, new worlds such as ours are continually being created; for as they perish new ones must be born to take their place, since atoms are indestructible and cannot merely vanish when a world perishes: they must so to speak be reincarnated in another world.

431. **terrai**: archaic genit.; as ll. 28, 67.

animantum: see note, l. 69.

432. **hic** = 'at this time': again l. 1002 = *tum*.

rota = *orbis*, l. 564, 'disk.' All was chaos before the atoms began to combine out of the great whirling, seething mass.

433. **mundi**: here as often = *caeli*; cf. l. 454.

435. **nostris rebus**, 'our things,' 'the things of our world,' 'the things we see.'

videri: passive.

436. Munro translates: 'But only a strange stormy crisis and medley gathered together out of first beginnings of every kind.'

tempestas: L. & S. *tempestas* II. B. 2.

moles. Ov. *Met.* i. 6–7 *unus . . . naturae vultus in orbe quem dixere chaos: rudis indigestaque moles*.

437. **omne genus**: see note, l. 428.

principiis = *primordiis*, metri gratia: see note, l. 184.

quorum. Munro hesitates between making this depend on (1) *discordia*, (2) *intervalla*, &c. The former seems slightly preferable.

438–9. Notice the very strong asyndeton: see l. 75.

turbabat governs all these accusatives.

conexus, 'connexions.'

concursus, 'clashings.' These two lines occur in ii. 726–7.

proelia miscens: in prose would be *proelia conserens*.

440. The atoms are of different size, shape, and also weight. Cf. l. 184.

figuras, 'shapes': sometimes = εἶδος or ἰδέα of Democritus, meaning 'atoms', in Lucretius. Take *quod* from the following line, at the beginning of this sentence.

441. **sic** = *sicut erant*, 'just as they were.'

442. Translate, 'nor fall into mutually harmonious movements.' For *motus dare* (= *facere*) see notes, ll. 347, 421.

443. **inde loci**: so too ll. 741, 791 (cf. l. 807 *ubi loci*, and *postea loci*, 'afterwards'); partitive genitive, 'in the next place.' Observe the constant repetition of the *dis-* and *se-* in the compounds in the next six lines. Duff adds that *dis-* denotes the separation of several, *se-* of two things.

444. **discludere mundum**, 'mark off the world.'

446. **secernere caelum**. Cf. Genesis i. 6 'Let there be a firmament in the midst of the waters . . . called the firmament Heaven'.

447. **sorsum . . . sorsus**. Lucretius uses *sorsum*, *seorsum* and *sorsus*, *seorsus* quite indifferently. In five lines iv. 491–5 he has *seorsum* once, *seorsus* twice, *sorsum* twice. In ii. 202 *deorsum* trisyllable, ii. 205 *deorsum* disyllable. See note on *sursum*, l. 465. Notice the change in construction from the infinitive to *ut* consecutive with the subj. See note, ll. 383, 460.

secreto umore, 'with water unmixed' = *mero umore*.

448. **secreti**: with *aetheris*, 'of ether unmixed' not with *ignes*; i. e. the heavenly bodies.

449. **quippe etenim**. For the pleonastic expression cf. note, l. 126.

terrai: as in l. 431. See note, l. 67.

450. **perplexa**: sc. *inter se*; as in l. 452 'closely entangled'; in ii. 394 we have *perque plicatis* (*elementis*).

451. **in medio**. The accus. would be more natural after *coibant*, but there is also the idea of rest coming from *capiebant sedis*.

453. **tam**: for *tanto*; but see l. 487 where *tam* again corresponds to *quanto*, but l. 489 *tanto*.

454. **efficerent**: consecutive subj. Notice the *m* alliteration.

magni moenia mundi (= *caeli*): the fiery ether; see note, l. 371.

455. **levibus**: observe the quantity of the first syllable.

456. **minoribu'**: see note, l. 53. Ether and fire was composed of the very smallest smoothest atoms; therefore its light can pass

through horn: on the other hand olive oil which runs slowly must be composed of larger or hooked atoms.

457. **rara**, 'porous.'

foramina, 'the openings' or 'pores' in the earth through which the atoms pass out. For the passage ll. 457–70 see note on l. 371.

459. **lĕvis**: translate adverbially as *gravis*, l. 497.

458. **se sustulit.** Milton, *Paradise Lost*, iii. 716 'And this ethereal quintessence of Heaven Flew upward'. Munro quotes Manil. i. 149 *ignis in aetherias volucer se sustulit auras . . . flammarum vallo naturae moenia fecit.*

460. **non alia longe ratione ac**: so in l. 1030 'much in the same way as . . .'

videmus has no construction depending on it: see note, l. 383.

461. Cf. ii. 319 *herbae gemmantes rore recenti.*

462. **radiati**, 'glancing with bright rays'; as in l. 700.

464. **ut**, 'as.'

fumare, 'to steam.'

465. **omnia quae**, 'mist and steam (or vapour).'

sursum. Lucretius also uses *sursus*. Cf. ii. 186–9 *sursum* three times, *sursus* once. See note, l. 447.

conciliantur might have been the future perf. *in alto*, 'on high.'

466. **corpore concreto**: abl. of attendant circumstances, 'with a closely cohering body,' i. e. clouds are substantial compared with mist: *nubila* (1) subject, (2) in apposition to *omnia*. Cf. vi. 482 *et quasi densendo subtexit caerula nimbis.* Verg. *Ecl.* vi. 34 *et ipse tener mundi* (= *aetheris*) *concreverit orbis.*

467. **diffusilis**: ἅπαξ λεγόμενον, 'expansive.'

468. **circumdatus**, 'sweeping round.'

470. **avido complexu**: so in ii. 1066 *avido complexu quem tenet aether.*

saepsit. Munro cites Milton, *Paradise Lost*, iii. 721 'The rest in circuit walls this universe', and vii. 264:

> 'Expanse of liquid pure
> Transparent elemental air, diffused
> In circuit to the uttermost convex
> Of this great round'.

And compares ll. 500 foll.

471. **hunc**: i. e. *aethera.*

exordia, 'rudiments'; see note, l. 331.

472. **interutrasque**: again ll. 476, 839, 'midway between earth and ether.' Cf. Arist. *Av.* 187 ἐν μέσῳ δήπουθεν ἀήρ ἐστι γῆς, i. e. midway between earth and heaven: an adverb; cf. *interea.* For the form of the termination Munro compares *alias* and *foras.*

473. **quae**: translate as *et ea.*

474. **quod**: the conjunction. Notice *fuĕrunt* as in l. 677; cf. *constitĕrunt*, l. 415.

475. **levia**: repeat the *tam.*

labier: archaic infin. for *labi*; see note, l. 51.

oras: see note, l. 85.

476. **ita**, 'though they are placed . . .'

ut, 'yet they . . .'

corpora viva: object to *versent*.

viva: a stock epithet; see notes, ll. 402, 538 on *vivit*.

477. **exstent** = *sint*: see notes, ll. 138, 144.

478. **quod genus**, 'just as,' adverbial; see note, l. 428.

in statione . . . manere: a very frequent phrase in Lucretius, 'remain stationary,' 'at rest'; again ll. 517–18.

479. **cum**: concessive.

moveantur: consecutive subj.

480. Notice the initial and internal *r* alliteration for the idea; cf. ll. 480–8. Munro 'briefly expressed by Verg. *Ecl.* vi. 35 *tum durare solum et discludere Nerea ponto coeperit*'.

retractis, 'when these were withdrawn.'

481. **plaga**, 'the level belts of sea.' Greek root πλακ, so πόντου πλάξ, 'ocean plain.'

482. Strong initial and internal *s* alliteration.

fossas, 'the hollows.' Duff = κοίλους τόπους.

483. **in dies**: *in dies* is used where there is any sense of increase, *quotidie* when there is no alteration; cf. l. 706.

quanto: followed lower by *tam* instead of *tanto*.

circum: an adverb.

aetheris aestus, 'the heats of ether.'

aestus: the subject.

484. **cogebant . . . terram . . . in artum**, 'compressed into a close mass.' Cf. *Aetna* 109 *non omnis in artum nec stipata coit*.

485. **extrema ad limina**, 'on its outer edges.'

486. **in medio . . . suo**: to be taken with *coiret*.

condensa: for *condensata*; very rare.

487. **tam**: see note on l. 453.

corpore: sc. *terrae*.

salsus sudor = ἱδρώς τῆς γῆς. Notice the *s* alliteration.

488. Observe how often *a* recurs in this line.

camposque natantis, 'the plains of water,' or 'watery waste.' Cf. Verg. *Georg.* iii. 198 *campique natantes*: lit. 'floating fields' = sea.

489. **foras**: of motion outside. *foris*: of rest outside, or as in l. 543 of motion from without. Lucretius, however, does not always keep the distinction.

490. **alta** with *fulgentia templa* forms the object of *densebant*, 'condensed,' 'made more substantial': as Duff says each reinforcement of particles squeezed out of the earth made ether more substantial in consistency.

491. **templa**: see notes, ll. 103, 521. Cf. l. 1436 *mundi magnum versatile templum*.

492. **montibus**: dative of advantage. The hills gradually rose.

494. **tantundem pariter**, 'to one uniform level,' rather pleonastic expression; cf. notes, ll. 126, 245, 285.

495. **terrae . . . pondus**, 'the ponderous mass of earth': cf. l. 1242 *argenti pondus plumbique potestas*, l. 1286 *ferri vis aerisque*. See too ll. 557, 720, 726.

496. **constitit**, 'consolidated.'

quasi: apologetic for the strange word *limus*, 'slime' as applied to *mundus*; see notes, ll. 360, 778.

497. **gravis**: translate adverbially, as *levis*, l. 459.

498. Notice the recurrence of *i*.

aer: the lower, thicker atmosphere.

aether: the higher, purer ether.

499. **liquidis**, 'clear-streaming.'

omnia gathers up the substantives in the preceding line.

pura: to be taken predicatively.

500. **alia**: sc. *relicta sunt*. See note on l. 470.

501. Notice the dactylic hexameter to emphasize the idea of lightly-moving ether.

super follows its case here. Ov. *Met.* i. 67 *liquidum et gravitate carentem aethera nec quicquam terrenae faecis habentem*.

502. **turbantibus aeris auris**, 'the troubled currents of air.'

turbantibus: as *turbare*, l. 504, intransitive. So in ii. 126. Cf. l. 831, *vertere* for *verti*.

503. **haec omnia**: all this troubled air, the lower atmosphere.

504. **turbare**: intransit.; as l. 502.

505. **certo . . . impete**, 'with steady sweep.'

impete is archaic for *impetu*: common in Lucretius. In vi. 327 he has the genitive, *impetis*.

506. **modice . . .**, 'gently and with uniform effort.' Notice how Lucretius uses an adverb and abl. of matter as parallels.

507. **Pontos**: the Euxine flows with a steady current towards the Mediterranean. Seneca, *N. Q.* iv. 2. 29 *Pontus . . . adsidue fluit . . . in unam partem semper pronus et torrens*. Shakespeare, *Othello*, iii. 3 'Like to the Pontick sea Whose . . . current . . . Ne'er feels retiring ebb, but keeps due on To the Propontick'.

508. The steady rhythm of the line is intended to express the steady flow of the Pontus. Gray's *Elegy* 'They kept the noiseless tenor of their way'.

509–33. Munro: 'This passage . . . stands in no connexion with what precedes and follows. l. 534 should at once follow l. 508. . . . The passage generally interrupts the fine flow and connexion'. It was in fact probably a later addition which was never properly grafted into the book.

509. **sit**: indirect question. As Duff remarks, there is no special mention of the planets here or elsewhere in the book.

510. Here Lucretius appears to hesitate to assert that the heavens revolve, though in ll. 505 and 1436 *mundi magnum versatile templum* he speaks definitely of their revolution. l. 624 Democritus believes in the revolution of the sky. Here the first possible reason is given for the movement of the stars.

511. **ex utraque parti**, 'at each end' or 'pole' of the axis of the heavenly sphere; the north pole or south pole.

parti: archaic abl. for *parte*. See note on l. 74.

polum is the object, **aera** the subject of *premere*.

512. **tenere**, 'confines it.'

utrimque, 'at both ends.' That is to say, the sphere of heaven revolves on its axis; this axis must be kept steady, which is done by two currents of air pressing each pole (each end of the axis) on the outside and keeping the axis firm in its place; then ll. 513–14 to make the sphere revolve we must have a third current of air, which may blow on the poles above the sphere in the direction in which the sphere moves, or ll. 515–16 it may blow underneath the sphere in the opposite direction.

513. **alium**: sc. *aera*, the third current of air.

supra: an adverb.

514. **volvenda** = *volventia* (for *se volventia*) *lustra*, l. 931; l. 1276 *volvenda aetas*. In Lucretius the gerundive is the equivalent of the present participle in meaning. So Verg. *Aen.* ix. 7 *volvenda dies*; cf. **secundus**: 'following' from *sequor*.

aeterni: see note on l. 402.

515. **alium**: sc. *aera fluere*.

subter: adverb.

subvehat: final subj.

516. **fluvios** is of course the subject to **versare**.

rotas atque haustra, 'waterwheels and waterscoops,' for the purposes of irrigation: the river makes the wheel revolve by flowing under not over it, then the wheel brings up the scoops one after another full of water; the scoops are fastened on the outer circumference of the wheel.

517. **etiam quoque**: pleonastic; cf. l. 126.

est uti possit = *potest*: also pleonastic; cf. l. 146.

manere in statione: as in ll. 478–9.

518. **tamen cum**, 'even while.'

signa: i. e. *astra*.

519. **rapidi aestus**: the subject, 'swift moving heats of ether.'

inclusi: sc. *in signis*, 'inside them.'

520. **viam**, 'a way of escape.'

ignes: object of *volvunt*.

521. **summania**: ἅπαξ λεγόμενον. Jupiter Summanus was the god of the sky who caused thunder at night; connected with *mane*, the god who precedes the dawn. Here 'the quarters of the sky at night'.

522. **aliunde . . . alicunde**: pleonastic, from some other source.' = *ab aliquo alio loco*. Duff remarks that the phrase = ἄλλοθέν ποθεν.

523. **ignis**: acc. plur.

serpere, 'glide.'

524–5. **euntis** (nom. plur. with *ipsi*) . . . **pascentes**: asyndeton; cf. 692–3 *serpens . . . lustrans*.

corpora is object to *pascentes*. Duff: 'The food of the stars is fire.' Cf. i. 231 *unde aether sidera pascit*? Verg. *Aen.* i. 608 *polus dum sidera pascet*. Duff quotes Seneca's theory as to comets, *N. Q.* vii. 21. 2 *ignium modo alimentum suum sequitur*.

526. **sit**: indirect question.

ponere certum, 'to lay down for certain.'

527. **possit fiatque**: indirect questions after *doceo* . . .

per omne, 'throughout the whole universe': as in l. 530.

528. **varia ratione creatis**, 'formed on varying designs.'

529. **sequor disponere**: for *pergo disponere*; cf. iii. 420 *pergam disponere*.

sequor: with infin. only here, though its compounds *exsequor*, *persequor* are used with the infin.

pluris, 'a number of.'

530. **quae possint esse**, 'which may exist for . . .'

531. **siet hic**: emendation for MS. reading which cannot be translated. It is an archaic form of *sit*, and may be traced back to an old optative form (cf. note, l. 196) *s-ie-m*, Greek ἐσ-ιε-μ = εἴην.

532. **vegeat**: a rare verb found in Ennius; it is the transitive of *vigeo*, with *motum*, 'imparts a lively movement to . . .': consecutive subj.

sit: indirect question.

quae: interrog.

earum: sc. *causarum*.

533. Notice the *p* alliteration. In l. 1453 we find the still stronger phrase *paulatim . . . pedetemptim progredientis*.

progredientis: the adjectival genitive, 'it is not characteristic of. . . .'

534. **ut**: final.

535. 'It is proper that the earth's weight should pass away and decrease': i.e. on the lower side, underneath, subter.

evanescere et decrescere: an instance of hysteron proteron, as ll. 625–6 *evanescere . . . imminui*. Lucretius seems to think that the surface of the earth is more or less flat (but see note, l. 764), both above and beneath, and that its weight gradually decreased underneath in order to preserve its position in the middle of the world, for he knew nothing of the laws of attraction.'

536. **naturam**, 'substance' or 'consistency'.

537. **uniter aptam**: a favourite phrase of Lucretius, ll. 555, 558, 'formed into one being.'

uniter: a strange form of the adverb, cf. *duriter*, l. 1402, though as Duff remarks the form of the genit. and dat. of *unus* make it more easy to account for.

538. **partibus**: dative after *coniunctam . . . aptam*.

vivit: subject is *terra*; as Munro says it seems harsh to apply this verb to *bruta terra*. But probably the parallel case of the human body which he is about to draw influences his choice of words. See too the note on *viva*, l. 476. Cf. l. 402.

539. **non est oneri**: sc. *terrâ* (subject) and *auris* (dative of disadvantage).

oneri: predicative dat., as l. 541, 'The earth does not weigh heavily on the airy portions of the world.'

540. **homini**: dat. of possessor.

pondere: abl. of description.

541. **oneri**: as in l. 539.

543. **foris**, 'from without.'

imposta: contracted for *imposita*. Cf. *compostus*, *oppostus*, *praepostus*, *repostus*, *suppostus*, *dispostus*, *postus*.

545. **magni**: locative of price with *refert*. This should not be called a genitive of price as it commonly is. The locative, subsequently mistaken for the genitive, hence *minoris*, was used for vague, general expressions of value; the ablative was used to express exact price. Cf. Hor. *Sat.* ii. 3. 156 *quanti emptae? parvo. quanti ergo? octussibus*. Notice the length of the first syllable of *refert* (perhaps for *rei fert*).

quid . . . queat res: the construction of *quid* is the same as in l. 87; see note and l. 88.

queat is indirect question. The reading is doubtful; Munro suggests *obeat* in place of *queat* = *quod munus obire debeat*, 'what its proper function is.'

546. **aliena**, 'an alien body': as *peregrinus*, 'foreign,' from a strange country.

547. Notice the frequent recurrence of *a*.

aliunde is redundant; as if one body is *alienus*, the other which is brought to it must be brought *aliunde*.

auris: dat. after *obiecta*.

548. **pariter**: at the same time as the airs.

ab: translate 'at.'

549. **eius**: i. e. *mundi*.

videtur: passive.

nobis (dat. of possessor): sc. *certae partes esse videntur*.

551. **supra**: preposition, to be taken with *se*.

omnia quae supra se sunt is the object to *concutit*, and is equivalent to *omnem aera* or *omnes auras*.

552. **posset**: sc. *terra*, as subject.

554. Notice the awkward rhythm.

haerent: subject is *terra et aer*.

555. **uniter apta**, 'framed into one being': as in ll. 537, 558.

556–63. In iv. 898–906 Lucretius says minute bodies can guide and control large bodies, the wind fine though it is drives on the heavily laden ship, the ship is guided by a little rudder which in its turn is controlled by a man's hand; so too great weights can be moved by blocks and pulleys.

556. **magno pondere**: abl. of description, equivalent to an adjective, to be taken with *corpus*.

nobis: probably dative of advantage, though it might be dative of possessor.

557. **vis animai**, 'the force of the soul': see note, l. 495. *animai*: archaic genit. Cf. ll. 28, 67.

tenuissima: the soul is made up of the finest atoms, impalpable and almost incomprehensible. See Introduction, The Philosophy of Epicurus.

559. **iam**, 'actually': as in l. 1066.

560. **quid potis est**: see note, l. 1. Other editors, misled by l. 563, emend to *animi*, 'of the reason.'

561. **quantum . . . valere possit**: cf. l. 285, pleonastic for *quantum valeat*, indirect question.

563. **nobis**. Duff, i. e. *corporibus nostris*.

564–5. Duff quotes two interesting passages which show how absurd this conclusion of the Epicureans seemed to be to other philosophers. Heraclitus held that the sun was εὖρος ποδὸς ἀνθρωπείου. Seneca, *N. Q.* i. 3. 10 *solem, quem toto terrarum orbe maiorem probat ratio, acies nostra sic contraxit ut sapientes viri pedalem esse contenderent*; Cic. *Acad.* ii. 82 *quantulus nobis sol videtur! mihi quidem quasi pedalis. Epicurus autem posse putat etiam minorem esse eum quam videatur.*

nimio = *multo*, abl. of measure: see L. & S. *nimius* II. 2. b.

solis rota: as in l. 432. *solis rota nec ardor* is probably to be taken together as a hendiadys, 'the sun's blazing wheel is neither greater nor less.'

565. To the Epicureans the senses and feelings are the standard of truth, the ground of certainty; the only qualification is that one must draw correct inferences from the evidence of the senses (ἐνάργεια, *perspicuitas*): all other reasoning is mere words.

566. **quibus . . . cumque**: tmesis; see note, l. 287. Cf. l. 289.

ignes: subject.

lumina: object.

567. **adicere**: in i. 689 we have the substantive, *adiectu tangere*; translate 'radiate their light upon us'. Cf. l. 576 *iactat . . . lucem*, and l. 600, note on *coniectus eorum*.

568. **illa**: i. e. *spatia*, 'those distances.'

libant: cf. l. 260.

569. **nil**: adverbial, 'not in the slightest.'

ad speciem . . . contractior, 'narrowed in appearance.'

ad, 'with regard to': cf. iii. 214 *ad speciem . . . ad pondus*. It can hardly be, as Duff supposes, 'to the eye' here; in that case we must have had the dative and not *ad*.

571. **loca**: i. e. 'spots on the earth'.

loca mulcent: so in iii. 141 *haec loca circum laetitiae mulcent*.

572. **hinc**, 'from here on earth': as l. 584.

filum: properly 'thickness'; here and ll. 581, 589 'size'.

videri: passive.

vere, next line, 'in their real dimensions,' should be taken with *videri*.

574. **nil adeo**, 'nothing at all': as in vi. 1170.

adeo emphasizes the word it follows.

575. **notho**, 'borrowed.' Catull. xxxiv. 15 *notho es dicta lumine Luna*. Notice the *l* and *u* alliteration of *luna . . . loca lumine lustrans*.

576. **iactat . . . lucem**: cf. ll. 566–7 *lumina . . . adicere*.

577. **quidquid id est**, 'be that as it may': so in l. 1252.

nilo: abl. of measure, with *maiore*, 'not at all greater.'

figura: abl. of description.

578. **quam**: sc. *figurâ qua cernimus lunam ferri . . .*, than the form that we see the moon sweeping along with.

579. **prius**: do not take *prius* until you reach *quam*, l. 581.

580. **specie confusa**, 'blurred in appearance': objects lose all sharpness and are not clearly defined at a distance.

581. **minui**: sc. *videtur*.

filum: as in l. 572.

581–4. This is rather a complicated sentence. Take *quandoquidem . . . praebet* first, then *quapropter . . . necesse est* with *hinc . . . in alto*, lastly *ut est . . . quantast*.

videatur is passive and depends on *necesse est*.

hinc, 'from here on earth': as in l. 572.

ut has nothing to do with *videatur*, but belongs to *cumque*, tmesis: see note, l. 287.

utcumque = *ut*, 'exactly as it is defined in its outlines (**oris extremis**, 'its extreme edges') and precisely as large as it is.'

quanta . . . quanta = *quantacumque*: cf. *quisquis* = *quicumque*, *quoquo* = *quocumque*: cf. *utut*, *ubiubi*.

585. This line is connected closely with l. 590; ll. 586–9 is a parenthesis containing an illustration drawn from fires on earth.

587. **dum . . .**, 'as long as their flickering is distinct.'

cernitur, 'perceived' by the senses.

588. **perparvum quiddam mutare . . .**, 'to change their size to a very little degree in either direction' (i.e. either by increasing or decreasing in appearance).

perparvum quiddam: adverbial acc. Cf. *nil*, l. 569, and *hilum*, l. 358.

589. **alteram utram**: a harsh elision. Elsewhere, cf. l. 685 *alterutra*, Lucretius avoids it by combining into one word, *alterutrum*.

filum: as in l. 572.

quo longius absunt, 'proportionately according to their distance away.'

quo: abl. of measure.

590. **scire licet**: referring back to l. 585. 'You may conclude that the fires of ether. . . .'

perquam pauxillo (abl. of measure), 'in an extremely minute degree.' Notice the *p* alliteration.

591. **exigua parte brevique**: abl. of measure, 'by a minute, insignificant fraction.'

592. **illud**: referring to what follows.

593. **tantulus**, 'insignificant.'

queat: indirect question.

594. **quod . . . compleat . . . perfundat**: consecutive subj.

rigando, 'by flooding': so iv. 200–3 *solis . . . lux ac vapor . . . cernuntur . . . per totum caeli spatium diffundere sese perque volare mare ac terras caelumque rigare*. So ll. 281–2 *sol irrigat . . . caelum*.

595. **calido . . . vapore**: see note, l. 236.

596. This line is omitted: l. 584 had crept in here by mistake. Cf. note, l. 771.

597. **hinc**, 'from this spot,' the sun.

patefactum, 'opened up.'

unum: emphatic, from its position in the line, 'one single.'

598. **largifluum**: ἅπαξ λεγόμενον.

scatere: third conjugation; see note, l. 40. In l. 952 Lucretius uses the same two verbs in combination; but here *erumpere* is transitive governing *lumen*, in l. 952 it is intransitive.

599. **sic**: with *conveniunt*; as in l. 600.

600. **sic**: with *confluit*.

coniectus eorum, 'the mass of them thrown together': see note on *adicere*, l. 567.

601. **capite**, 'fountain head': as in l. 293.

602. **aquai**: archaic; see note, l. 67.

603. **campis**: abl. of place.

riget . . . redundet: indirect question.

604. **etiam quoque**: pleonasm; cf. notes, ll. 126, 245.

est . . . uti, 'it is possible that . . .'

non magno, 'though it is not great.'

igni: archaic abl.

605. **percipiat**, 'take possession of,' 'occupy': retaining the old use of *capio*. L. & S. *percipio* I. A. Lucretius uses it frequently, iii. 79 *vitae percipit humanos odium*, iv. 729 *percipiunt oculos*, iii. 28 *me . . . voluptas percipit*, where, as Duff remarks, Cicero would have said *percipio voluptatem*.

calidis fervoribus: cf. note, l. 236.

606. **ita**: to be taken with *ut*.

607. **queat**: consecutive.

608. **quod genus**, 'even as': so in l. 478; cf. note, l. 428.

segetes stipulamque: one would expect *in* or *ad* with acc. after *accidere*. Munro quotes Plaut. *Stich.* 88 *vocis sonitus auris accidit*.

611. **caecis fervoribus**: abl. of description = 'invisible.'

612. **sit**: consecutive subj.

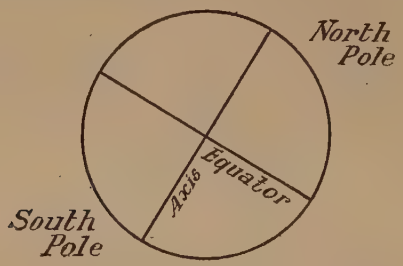
613. **aestifer**, 'laden with heat.'

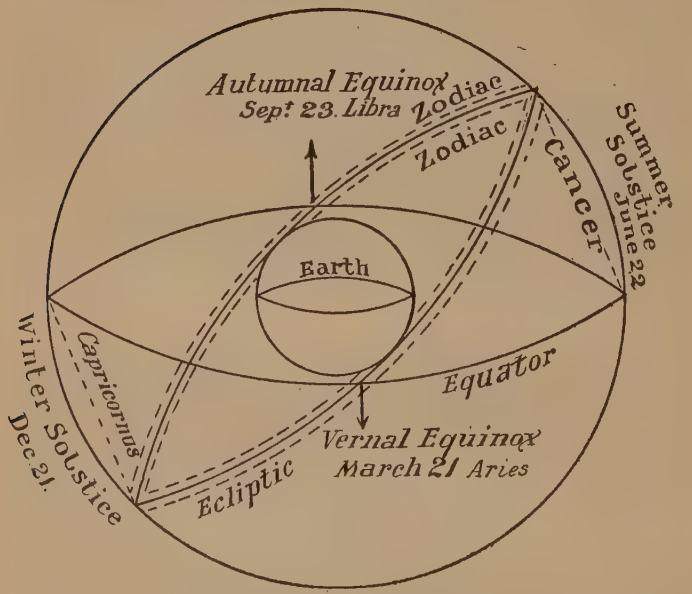
tantum: (1) 'merely', to be taken with *aestifer*; (2) 'to such a degree', to be taken with *exaugeat*, i. e. that little though the sun seems its rays have such power.

Munro quotes Tyndall who calls this 'a remarkable passage', and proves that the sun's invisible rays far surpass the visible rays in heating power, in fact 98 per cent. of the heat comes from invisible rays. A series of plans will probably best explain to the reader the astronomical terms used by Lucretius in this and other passages. The explanations of the plans are largely drawn and condensed from Mr. Duff's account of the Celestial Sphere.

The axis is the direction of the earth's rotation. As we do not notice this rotation the heavenly bodies seem to revolve round us. The sun therefore seems to rise and set every day. It also seems to travel round the sky once a year owing to the fact that the earth revolves on its orbit round the sun. The ancients believed that the earth was at rest in the centre of the universe. The North and South

Poles are the points where the axis meets the sphere. The Equator is an imaginary line drawn round the earth midway between the poles at right angles to the axis.



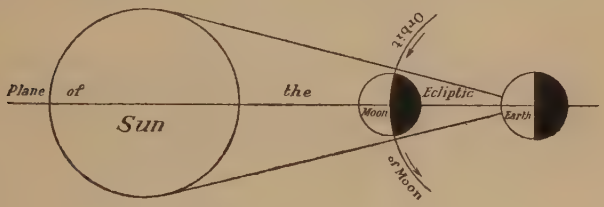


The Ecliptic is the apparent path of the sun among the stars (*orbis*, l. 648). The Nodes or Equinoxes (*nodus*, l. 687) are the points of intersection of the Ecliptic and Equator, when the days and nights are of equal length, on or about March 21 in the sign of Aries (l. 687), and on or about September 23 in the sign of

Libra. The daily revolution then coincides with the Equator, resulting in days and nights of equal length.

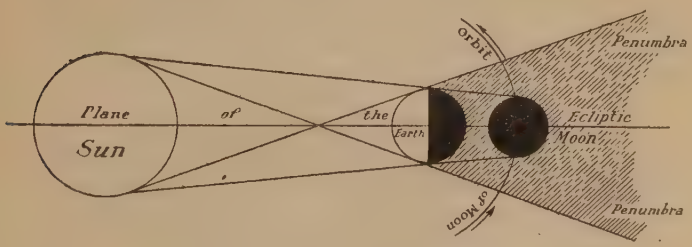
The Solstices or Tropics (so-called because the sun seems to stand still and to turn back), l. 617, are the points in the Ecliptic when the sun is furthest from the Equator, June 22 in the sign of Cancer (l. 617) when we have the longest day, December 21 in Capricorn (l. 615) when we have the longest night, the greater half of the Ecliptic being above and below the Equator in turn, resulting respectively in the longest day and longest night.

The Zodiac (so-called from the animals ζῴδια, after which the twelve signs are named, l. 691) is a narrow belt of sky on each side of the Ecliptic; it is divided into twelve equal parts, six north, six south of the Equator. The system was evolved in Babylon at least as early as 2000 B. C.



ECLIPSE OF THE SUN (ll. 753-5).

The Moon passing on her orbit between the Sun and the Earth intercepts the light of the Sun and causes a solar Eclipse. If the Moon travelled in the plane of the Ecliptic there would be a solar Eclipse whenever there was a new moon.



ECLIPSE OF THE MOON (ll. 762-4).

The Moon passes through the Zodiac once a month. Her orbit is slightly inclined to the Ecliptic; if it coincided with it the Moon would pass between the Earth and the Sun, causing an Eclipse every month. The Penumbra is the *coni umbras*, l. 764.

614. **ratio**, 'explanation.'

615. **quo pacto**, 'in what way.' *pacto* = *modo* or *ratione*.

partibus, 'positions in summer.'

aegocerotis, the Greek for *capricorni*, depends on **flexus**, 'the midwinter turning-point of Capricorn.' *flexus* = *metas*: the metaphor is from chariot-racing.

adeat: indirect question.

617. 'To the solstitial goal of Cancer.' There are two solstices in the year, the summer solstice when the sun is nearest the equator in the sign of Cancer, June 22, and the winter when it is furthest away in the sign of Capricorn, December 21. The solstice received its name from the fact that the sun seemed to stand still when it reached the turning-point.

vertat: indirect question. Contrast *metas*, l. 690.

618. **lunaque**: sc. *quo pacto*.

videatur: indirect question, passive.

obire, 'to pass over.'

mensibus, 'all the months', 'every month'; so 'once a month'.

619. **in quo cursu**: lit. 'in which course', 'a course which the sun takes the period of a year to traverse'.

620. **non . . . simplex**: emphatic, 'no single.'

621. **id**: the subject to *videtur*, 'that view seems likely to be even with (or among) the first (*vel cum primis*)'; i. e. 'the most probable theory'.

622. **sancta . . . sententia**, 'the revered judgement.' *sancta*: see notes, ll. 8, 19; cf. Lucil. *Fr. Valeri sententia dia*; Hor. *Sat.* i. 2. 32 *sententia dia Catonis*. This line occurs in iii. 371.

viri: complimentary, 'the sage.'

Democritus was a philosopher of the Ionian school. He lived in the latter half of the fifth century B. C. and was born in Abdera. He was the chief prophet of the Atomic theory and maintained the existence of Void. The Epicureans followed the physics of Democritus. He did not believe in the immortality of the gods. He was called 'the laughing philosopher' in contradistinction with Heraclitus 'the weeping philosopher'.

623. **quanto**: abl. of measure.

sint: subordinate clause in Oratio Obliqua.

propter: with *terram*; for its position see note, l. 31.

624. **caeli turbine**, 'the whirling revolution of the sky.' The nearer the constellations are to the earth the slower they move, because they are less affected by the revolution of the heavens.

625. **evanescere . . . imminui**: hysteron proteron; see note, l. 535. These verbs depend on *Democriti sententia ponit*.

illius: i. e. of the revolution of the sky.

626. **subter**: adverb, 'in the lower parts.'

627. **posterioribu' signis**: see note, l. 53, 'the rearward signs of the zodiac,' which have not yet but soon will overtake the sun until the whole zodiac has passed it in the yearly course, though the sun seems to us to have passed by the zodiac in the opposite direction to which it really moves; cf. ll. 635–6.

628. **sit**: subj., due to Oratio Obliqua. *sol* is the subject.

fervida signa: especially the higher ones, which are more under the influence of the whirl of the sky and therefore move more quickly.

629. **magis hoc**: i. e. *lunam magis quam solem relinqui ponit.*

eius: i. e. *lunae.*

630. **abest . . . propinquat**: should be subj. in Oratio Obliqua; but Lucretius is beginning to put himself into Democritus' place and take up his mantle, and in l. 632 he passes wholly into Oratio Recta; with *propinquat*, sc. *magis*. 'The lower her path, the further . . . the nearer she draws . . .'

631. **posse**: after *ponit.*

tendere cursum, 'keep pace with.'

632. **flaccidiore . . . turbine**, 'the fainter the whirl by which.'

fertur: sc. *luna*. He has now passed completely into Oratio Recta.

633. **inferior**, 'being as she is lower . . .'

634. **circum**: adverb.

adipiscuntur, 'overtake.' Livy uses *adipiscor* in this sense.

praeterque feruntur: probably tmesis; see note, l. 287.

635–6. 'The signs of the zodiac pass by the moon very rapidly because she is so near to and they so far from the earth, but she seems to us to be passing them in the opposite direction': see note, l. 627, where the same is the case with the sun.

636. **ad hanc . . . revisunt**: as in ii. 359 *revisit ad stabulum. reviso* with *ad* is found in the older writers, *reviso* with the accus. in the classical authors.

637. **fit . . . ut . . . possit**: for *potest.*

mundi = *caeli.*

e transversis partibus, 'from quarters crossing the sun's path.'

aer . . . alter: for *aeres duo, alter qui queat, alter qui reiciat.*

638. **alternis**: adverb.

639. **queat**: consecutive subj.

signis: abl. of separation. These two currents of air drive the sun to the winter and summer solstices respectively.

640. **flexus**: as above, l. 616.

gelidum rigorem, 'freezing cold.'

641. **reiciat**: consecutive subj.

frigoris umbris. Verg. *Georg.* iii. 357 *tum sol pallentes haud umquam discutit umbras.*

643. **ratione pari**, 'in like manner.'

644. **volvunt**: i. e. *volvendo faciunt*, 'make revolutions of mighty years in mighty orbits.'

645. **aeribus**: causal abl., 'under the pressure of currents of air.'

alternis: of course with *partibus.*

646. **ventis**: causal abl.

647. **partis**, 'directions.'

inferna supernis, 'the lower in directions opposite to the upper.' *supernis*: the dat. depends on *diversas.*

648. **qui**: old abl.; see note, l. 233.

qui minus: lit. 'why less', 'why not just as well'.

queant: subj. of deliberative question.

orbis, 'orbits.'

649. **aestibus**, 'currents of air.'

sidera: all the heavenly bodies.

651. **de**, 'after'; see L. & S. *de* I. B. 1.

ultima caeli, 'the remotest regions of . . .'; cf. *cuncta viai*, l. 739; *caerula mundi*, l. 772; so *plana urbis*, *medium viae*, *extremum aestatis*.

652. **impulit**, 'struck on.'

efflavit: cf. Cic. *Tusc.* i. 9 *animam efflare*; l. 758 *solque suos . . . dimittere languidus ignis*.

653. **itere**: poetical for *itinere*; vi. 339 Lucretius has *itiner* for *iter*.

aere multo, 'by passing through much air.'

654. Observe the *c* alliteration.

655. **supra**: preposition, with *terras*.

orbem, 'his orb.'

656. **Matuta**, or Mater Matuta, was the goddess of dawn: she was confused with Ino who, on throwing herself into the sea, was made a marine goddess and was known thereafter as Leucothea. There was a temple to her in Rome. When Dawn is personified it is usually known as Aurora.

oras aetheris: see note, l. 85.

658. **ille**: emphasizes.

659. **anticipat** governs *caelum*, 'seizes the skies before his time.'

accendere: sc. *caelum*.

661. **consuerunt**: trisyllable; cf. ll. 53, 189, 702.

662. **faciunt . . . gigni**: cf. ll. 703, 761. *facio* with the inf. (instead of *ut* with the subj. or the subj. alone) is rare but classical; see L. & S. *facio* I. A. γ.

semper, 'every day': as in l. 731.

663. **quod genus**, 'even as': see note, l. 428. Mount Ida in Phrygia, not the Mount Ida in Crete. Notice the two adj. to a single subst. without a copula; cf. ll. 24–5.

664. **orienti lumine**, 'at daybreak.' Munro: 'The abl. in *i* is rare when it is a real participle; common when the participle is rather an epithet.'

665. **inde . . .**, 'then that they unite into a single ball as it were.'

quasi: slightly apologetic.

666. **in his rebus**, 'herein.'

667. **certo tempore**: repeated ll. 669, 671; and *tempore certo*, l. 670; *in certo . . . tempore*, l. 672. Cf. the triple repetition of the same phrase, ll. 748–50.

669. **multa**, 'many phenomena of nature': see note, l. 750.

671. **arbusta**: for *arbores*, metri gratia; cf. notes, ll. 39, 184.

672. **dentis cadere imperat**, 'ordains that the teeth should be shed.' *impero* with acc. and infin. is rare for *ut* with

the subj.; it is almost confined to the poets and post-Augustan writers.

673. **impubem . . .**, 'and the boy put on the soft dress of puberty.'

674. Cf. l. 888 *iuventas occipit et molli vestit lanugine malas.* Verg. *Aen.* viii. 160 *tum mihi prima genas vestibat flore iuventas.*

pariter, 'equally from both cheeks.' Duff cites i. 88 *infula . . . ex utraque pari malarum parte profusast.*

675. Observe the strong asyndeton; cf. ll. 438–9.

676. **non nimis**, 'not very': common in Cicero; see L. & S. *nimis* I. B.

677. **fuĕrunt**: as in l. 474.

678. **mundi** depends on *origine.*

ita . . . cecidere, 'have fallen out in this way.'

679. **conseque**, 'in due sequence.'

680. **crescere . . . tabescere**, 'wax . . . wane.'

681. **cum sumant.** *cum* is purely temporal, the subj. is probably due to the wish to denote repetition; cf. note, l. 63. Cf. iii. 736 *cum subeant.*

683. **imparibus . . . anfractibus**, 'in curves of unequal length': through the ether both above and below the horizon.

684. **orbem**, 'orbit.'

685. **alterutra**: see note, l. 589.

reponit . . ., 'adds in compensation in its opposite half just so much more, as he comes round again (*relatus*).' *repono*, like *reddo* and *ἀποδίδωμι*, of 'giving what is due' rather than actually 'giving back'.

686. **eius**: i. e. *orbis.*

687. **anni nodus**, 'the node of the year': i. e. the place of intersection of the ecliptic and equator at the two equinoxes; the dates are March 21 and September 23. Compare Cic. *Arat.* 287 *in quo autumnali atque iterum sol lumine verso exaequat spatium lucis cum tempore noctis.*

689. **medio cursu** (sc. *solis*) . . ., 'when the sun's course lies midway between the blasts of . . .' *medio cursu*: abl. absolute; i. e. when the sun's course lies east and west.

690. **caelum** is the subject to *distinet*, 'heaven keeps his two goals apart at an equal distance'; and if these two goals, that is the point where the sun rises and where it sets, are equally far apart, the length of the day must be equal to the length of the night. Munro points out that *metas* are here the points of the sun's setting and rising, and not, as in l. 617, the two tropics or solstices.

691. **signiferi . . . orbis**, 'the starry circle'; the zodiac, with its constellations named after animals, *ζῳδια*, in l. 712 *signorum orbem, ὁ ζῳοφόρος κύκλος, ὁ ζῳδιακός.*

692–3. **sol . . . serpens . . . lustrans**: see note, l. 524.

concludit . . ., 'takes up the period of a year.'

693. **obliquo . . . lumine . . .**, 'lighting with slanting rays'; cf. l. 1436 *mundi magnum versatile templum sol et luna suo lustrantes lumine circum.*

694. **ratio,** 'the reasoning' or 'science'.

695. **notarunt,** 'have mapped the quarters of heaven with their noble array of constellations.'

697. **ignis:** genit., depending on *iubar.*

haesitat, 'is retarded'; cf. vi. 333 *in remorando haesitat.*

699. **longae:** predicative, 'linger long.'

700. **dum,** 'until the radiant badge . . .'

radiatum: 'with bright rays'; as in l. 462. Cic. *N. D.* i. 36. 100 *horum (mundi et caeli) insignia, solem, lunam, stellasque.*

701. **sic:** i.e. for the reason mentioned above, *quia crassior est aer.*

702. **consuerunt:** trisyllable; as in ll. 189, 661.

703. **faciunt:** with infin.; see note, l. 662.

certa parte, 'from a particular quarter.'

704. There is a lacuna here. Munro supplied the line *qui faciunt solis nova semper lumina gigni* (from l. 662), attributing its omission to its similarity to l. 703.

706. **in . . . dies:** see note, l. 483.

707. **ad speciem:** as in l. 724, 'towards our gaze' or 'eyes'.

orbi: archaic abl.; see note, l. 74.

708. **donec,** 'until.'

eum contra: for *contra eum*; cf. note on l. 31.

pleno bene, 'right full.' *bene* is intensive = *valde*; see L. & S. *bene* II. 1 and 2.

709. **super edita,** 'raised high aloft.' *super*: adverb. Duff remarks: 'It is the case that the moon when full rises about sunset.'

710. **retro quasi,** 'reversing as it were her course'; cf. l. 725.

712. **ex alia . . . parte,** 'from a different quarter.'

signorum orbem: see note, l. 691; for the moon like the sun passes through the signs of the zodiac, but not on the same orbit as the sun; if it travelled on the same orbit there would be a monthly eclipse.

713. **faciunt,** 'make her do'; i.e. according to the theory of . . .

pilai: archaic genit.; see note, l. 67. Again in ll. 720, 726.

714. **cursus . . . viam,** 'the path of her orbit,' 'her ellipse'; cf. l. 1124 *iter viai*; ii. 626 *iter omne viarum.*

715. **est . . . quare possit** = *est ut possit*: a characteristic Lucretian pleonasm for *potest.*

716. **volvier:** archaic infin. for *volvi*; cf. *amplectier*, l. 730, and see note, l. 51.

formas, 'phases.'

718. Notice the recurrence of *o*, 'blocking and barring her path'; see note, l. 754. For **omnimodis** see note, l. 190.

719. **potis est:** see note, l. 1.

cassum lumine. Lucretius is rather fond of this phrase; so again l. 757. *cassum* also takes the genitive.

720. **ut,** 'as.'

globus . . . pilai, 'a spherical ball': somewhat pleonastic; cf. notes on l. 495 and l. 726. For *pilai* see note, l. 67.

si forte=*fortasse*, εἰ τύχοι, 'possibly.'

721. **parti**: archaic abl.; see note on l. 74.

722. **formas**, 'phases': as in l. 716.

723. **eam partem**: the shining half of the moon.

724. **ad speciem . . . oculosque patentis**: rather redundant.

ad speciem, 'to our gaze': as in l. 707.

725. **inde . . .**: as in l. 710, *q. v.*

726. **glomeraminis atque pilai**: hendiadys for *globus pilai*, l. 720, which is itself a pleonasm for *pila*. *pilai*: see note, l. 67.

727. **Babylonica Chaldaeum** (contracted gen. plur.). Munro quotes from Vitruvius on the scientific doctrines of the Chaldees. Berosus, a priest of Belus in Babylon, left the Chaldaeans, and spread his doctrine about in Asia that the moon was spherical, half white, half blue. Duff adds that the Chaldaeans, his successors, were disliked by the scientific astronomers (*astrologi*, l. 728) as being soothsayers and astrologers. They are mentioned with contempt by Juvenal in vi. 553–6 and x. 94 *cum grege Chaldaeo*. The terms *Chaldaei*, *mathematici* were generally reserved for fortune-tellers who made use of the stars. They were frequently expelled by the Senate from Italy, but as frequently returned. Tac. *Hist.* i. 22 *genus . . . potentibus infidum, sperantibus fallax, quod in civitate nostra et vetabitur semper et retinebitur.*

728. **artem**: 'the system' of the scientific astronomers, who give the correct view (ll. 705–14). *artem* is governed by *refutans*.

contra: adverb, 'in opposition to them.'

729. **proinde quasi**, 'just as though.'

quod pugnat uterque, 'what each party fights for'; the subject to *nequeat*.

fieri, 'actually be,' 'be true.'

730. **aut sit . . .**, 'or there were any reason why you should venture to embrace (*cur . . . ausis*) this theory less than that' (*hoc minus illo*).

ausis: see note, l. 196.

amplectier: see note, l. 51.

731. **cur nequeat**: indirect question after l. 735.

semper: as in l. 662, 'every day.'

732. 'In a regular order of forms and in set phases': i. e. each new moon would have its own particular phase, either a little larger or a little smaller than the preceding moon, but that it would not (as the moon really does) pass through a succession of phases.

733. **in . . . dies privos**: see note, l. 274.

aborisci: ἅπαξ λεγόμενον = 'perish' (like *aborior*), depends on *nequeat*. *quaeque creata*, i. e. each moon which is created.

734. **alia**: *sc. luna*.

reparari, 'be produced,' depends on *nequeat*.

in parte locoque, 'in its room and place'; a pleonasm. *in parte*: perhaps almost = ἐν μέρει, 'in its turn'; then *in loco*, 'and

in place of the old moon.' To explain the exceptional use of *pars* in this sense Munro suggests that it is equivalent to *partem suscipere*, the whole expression being condensed for *reparari in loco illius et partem eius suscipere.*

735. **vincere verbis**: as in l. 99 *et quam difficile id mihi sit pervincere dictis*; cf. Verg. *Georg.* iii. 289 *verbis ea vincere magnum quam sit.*

736. **cum**: causal; cf. Shakespeare, *Love's Labour's Lost*, Act v, Sc. 2, Entrance of Spring and Winter.

737–47. This is not unlike the scene in Shakespeare, *Tempest*, Act iv, Sc. 1, where Iris, Ceres, and Juno (Nymphs) enter in procession. Duff describes a kind of masque or pageant of the seasons which are used as an example of the regularity of natural phenomena. Observe how Lucretius inverts the natural order, which is Zephyrus, Flora, Cupid, Venus, Spring.

737. **it**, 'pass on their way.'

praenuntius, 'harbinger': i.e. Cupid; cf. iv. 1057 *namque voluptatem praesagit nuta cupido.* Ov. *Fast.* ii. 767 *lucis praenuntius ales.*

ante: adverb.

738. **pennatus** and *pinnatus*: both forms are used.

propter: preposition; see note, l. 31.

739. **quibus**: i.e. Venus and Cupid; dat. of advantage, 'and in their honour.'

ante: adverb.

viai cuncta: see note, l. 651; for the archaic genit. see note, l. 67.

praespargens: very rare.

740. Notice the rather unusual rhythm and the strong assonance. *oppleo* is very often used in a bad sense. Duff quotes i. 174 *vere rosam, frumenta calore, vites autumno fundi suadente videmus.*

741. **inde loci**, 'next'; see note, l. 443.

una: adverb.

742. **pulverulenta Ceres**, 'Ceres with her dusty train'; cf. *frumenta calore*, quoted l. 740, and Verg. *Georg.* i. 65 *glaebas . . . pulverulenta coquat . . . solibus aestas. etesia flabra*, 'the yearly blasts . . .' = *etesiae*, winds that blow annually (ἐτησίαι, ἔτος) during the dog-days for forty days, as in vi. 730 *etesia flabra aquilonum.*

743. **autumnus . . . Euhius Euan.** Autumn follows with its natural companion Bacchus, the god of grapes and wine; cf. *vites autumno fundi suadente*, quoted l. 740. *Euhius Euan*, the Greek name for Bacchus, were the shouts (εὐοῖ, εὐᾶν) of triumph in honour of Dionysus. Duff quotes Eur. *Bacch.* 157 εὔια τὸν εὔιον ἀγαλλόμεναι θεόν; cf. Ennius *euhan, euhoe, euhoe, euhius.*

744. **tempestates**, 'seasons.'

745. **altitonans**, 'loud roaring'; usually of Jupiter who thunders on high.

Volturnus or *Vulturnus*, 'south-east wind.'

auster, 'south wind'; not a favourite wind, judging from the epithets used with it in L. & S.

746. **bruma**, 'midwinter': perhaps here in the sense of the shortest day, which is its original meaning; contracted from *brevima = brevissima*. Varro, *L. L.* vi. § 8 *dicta bruma quod brevissimus tunc dies est.*

pigrum, 'benumbing.' So Tibull. i. 2. 29 *pigra nocent hibernae frigora noctis.*

748. **quo**, 'and so.'

certo tempore: repeated in the next two lines (see note, l. 667), at a fixed time every day; cf. l. 732.

750. **cum**: causal. For the sentiment of the regularity of nature see ll. 669–71.

751. **item quoque**: pleonastic; see note, l. 126; l. 245 *quoque item*. *defectus*, 'eclipses'; *latebras*, 'obscurations.' Verg. *Georg.* ii. 478 *defectus solis varios lunaeque labores.*

752. **pluribus**, 'numerous.'

753. **queat**: deliberative question.

754. **lumine**: abl. of separation.

a terris, 'on the side (of the sun) facing the earth'; cf. l. 1332 *ab nervis = a parte nervorum.*

altum caput: sc. *lunae*, 'her own high exalted head.'

obstruere . . . obiciens: in line 718 we had *occursans officiensque.*

ei is governed by the compound *obstruere.*

755. **caecum**, 'opaque'; again sc. *lunae.*

radiis: dative after *obiciens*, sc. *solis.*

756. **tempore eodem = *tamen***: so again ll. 765, 1045; see note, l. 83.

aliud corpus: subject to *putetur*, deliberative question.

id: object to *facere.*

757. **labatur**: consecutive subj.

cassum lumine: as in l. 719.

758. Cf. l. 652. **languidus**, 'quite exhausted,' predicative.

759. **nequeat**: deliberative question.

recreareque. In Augustan poetry it was very exceptional to attach *que* or *ve* to a word in a short *e*. Lucretius, however, does so frequently: l. 874 *esseque*, l. 1021 *muliebreque*, l. 1052 *suadereque*, l. 1289 *aereque.*

760. **cum**: temporal.

761. For **faciunt** with infin. see note, l. 662.

Duff translates **interstingui**, 'to be quenched for a time,' more accurately than Munro, 'to be quenched': he cites *interquiescere*, 'to rest for a time.'

762. **queat**: deliberative question.

vicissim: as the moon in her turn hid the sun.

763. **super = *insuper***, 'moreover': a fairly common use.

oppressum . . . tenere, 'to keep the sun's light suppressed,' and so prevent him from lighting up the moon.

764. **menstrua**: sc. *luna*, 'the moon in her monthly course.'

rigidas coni . . . umbras, 'the well-defined conical shadows (of the earth).' *rigidas*: cf. poet. ap. Cic. *Tusc.* i. 37 *rigida . . . caligo*, 'darkness that may be felt.' *coni . . . umbras*: the cone of the earth's shadow. *coni* defines *umbras*, acting as an adj.; see note, l. 369. Lucretius' theory of the flat shape of the earth (note, l. 535) hardly agrees with his statement here of its conical shadows; Munro suggests that he accepted this latter theory blindly from the observations of astronomers. With regard to *menstrua* this epithet should not be pressed; it does not mean 'every month', but 'occasionally in her course which, as a matter of fact, lasts a month'; otherwise we should be making Lucretius say that there was a lunar eclipse every month. This would only happen if her orbit lay in the plane of the sun's ecliptic.

765. **nequeat**: sc. *cur*, deliberative question.

tempore eodem: see note, l. 756.

succurrere = *succedere*, 'pass beneath'; only here in this sense.

766. **supra**: preposition. During a lunar eclipse the sun is supposed to be below the earth, which intercepts the sun's light and prevents the moon from reflecting the sun's rays.

perlabier: archaic infin.; cf. note, l. 51.

767. **interrumpat**, 'intercept'; consecutive subj.

768. **et tamen**: as in l. 213, 'and after all'; putting this or other considerations out of the way.

769–70. For the sentiment cf. 758–61 of the sun.

languescere, 'be exhausted and grow faint': as *languidus* of the sun.

770. **per**: out of place, for *per loca*; as Duff says, its proximity to *inimica* makes it less harsh. See note, l. 31; cf. l. 869 *suo sine . . . labore*; so in i. 841 *ignibus ex*, vi. 1264 *viam per*.

771. This line is omitted; it is the same as l. 764. See note, l. 596.

772. **quod superest**: see note, l. 64, 'moreover.'

caerula mundi: see note, l. 651, 'the blue vaults of heaven.' *mundi* = *caeli*.

773. **quicquid** = *quidque*: see note, l. 131.

resolvi, 'explained'; lit. 'unravelled'.

posset: indirect question.

774. **cursus . . . meatus**: objects of *cieret* (indirect question).

776. **quove**: see note, l. 71.

offecto: very rare in the personal passive, 'blocked out.'

obire, 'be blotted out,' perish. Notice the alliteration.

777. **neque opinantis** rare: for the more usual form *necopinantis*, 'little expecting it.'

obducere. *ob* has an adversative force in compounds.

778. **quasi**: apologetic for the word *conivent* as applied to the heavenly bodies; see notes, ll. 360, 496.

lumine, 'eye of light.'

779. **convisunt** continues the metaphor of *conivent*, *lumine*. Notice the alliteration of *c* and *l*.

780. **nunc redeo.** Lucretius will now return after the long digression beginning l. 509.

mollia . . ., 'the fields of the earth in their tender age.'

781. **luminis oras**: see note, l. 85.

781–2. **quid . . . crerint**: indirect question after some verb such as *resolvo* understood from *redeo*. *crerint* contracted for *creverint* = *decreverint*; cf. Catull. lxiv. 150 *germanum amittere crevi*. In l. 393 *cernere* = *decernere*, but in a slightly different sense.

committere ventis: Verg. *Aen.* xi. 560 *quae nunc dubiis committitur auris*.

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T. LUCRETI CARI

DE RERUM NATURA

A SELECTION FROM THE FIFTH BOOK (783–1457)

EDITED

WITH INTRODUCTION, ANALYSES AND NOTES

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PREFACE

THIS edition has been prepared in the hope that with its help some of the finest and most vivid Latin poetry that survives may in the future be read in lower forms than has been hitherto usual.

There is a natural objection to reading part of a poem or to beginning in the middle of a book, and it is hoped that an edition which omits the preceding eight hundred lines, a long and difficult passage with no particular connexion with this selection, and which so presents a subject of more reasonable length for a middle form, will virtually if not actually remove such hesitation.

Though a selection, it is *totus teres atque rotundus* and forms a complete epic in itself. Lucretius is generally considered to be a difficult author and is reserved for the higher forms, but it is believed that this selection will, with the aid of the notes, be found to present little difficulty to the average boy, and it will certainly give him an intensely graphic picture of the development of civilization as conceived by the most imaginative genius among Latin writers. Every edition of Lucretius is based on Munro's great work, and this one owes much to Mr. Duff's admirable edition. I also offer my sincere thanks to the reader of the Clarendon Press for many instances of suggestive advice. The text of the Clarendon Press has been followed practically throughout.

W. D. LOWE.

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INTRODUCTION

THE LIFE OF LUCRETIUS

THE life of Lucretius, as it is usually accepted, is given here without any examination of the conflicting accounts and theories put forward by different editors.

Titus Lucretius Carus was born probably B.C. 99 and died October 15, B.C. 55. The statement that his death was due to suicide during madness brought on by drugs must be viewed with suspicion. He was a man of good family. He had literary tastes and showed no inclination for a political life, more especially during the troublous times of the struggles between Pompey and Caesar. He lived the life of a student and devoted himself to the philosophy of Epicurus: the result of his lifework is the presentation of that philosophy in the didactic poem *De Rerum Natura* in six books, a work that is not the production of a madman, whatever defects it may contain. Moreover, as Mr. Mackail in his *Latin Literature* says: 'Many of the most important physical discoveries of modern times are hinted at or even expressly stated by Lucretius.' Indeed his theories of the atomic doctrine, of light, of evolution and of the ultimate constitution of atoms have won the admiration of modern scientists.

THE STYLE OF LUCRETIUS

Lucretius was, at any rate in literature, *laudator temporis acti*. He admired and imitated the older poets: Homer and Empedocles among the Greeks, Ennius and the older tragedians among the Latin poets, were studied diligently by him and influenced his language and turn of expression strongly. He is fond of using old and half-forgotten forms of words: he uses and invents compound adjectives of a Greek type, such as *vulgivagus*, *levisomnus*, *anguimanus*, *pennipotens*, *bucerus*: alliteration and assonance, a characteristic feature in the early period of the literature of any nation, play a prominent part, especially where the poet wishes to drive a point home.

The Lucretian hexameter is distinctly in advance of that of Ennius, yet it is closer to the rugged verse of the older poet than to the smoothness and elaboration of the Vergilian line. He is ready to use spondaic endings, archaic terminations of substantives and verbs: he makes free use of elision and frequently marks off the

first two feet from the rest of the line, interrupting the rhythm by a sudden jerk. One of the especial features in the verse of Lucretius is his method of dealing with the fourth foot, which is frequently contained in a single word and ends with it, while Vergil prefers to have a caesura. For instance Vergil writes 'arma virumque cano Troiae qui primus ab oris,' inverting the natural order of *Troiae qui*: Lucretius would be content to retain the natural order *qui Troiae* and to dispense with the caesura which Vergil prefers to have. So in our passage Lucretius writes 'per totum corpus adhaesu, quod tantis viribus auctos, nix venti fulmina grando'; in these lines Vergil would probably have written 'totum per corpus adhaesu, tantis quod, venti nix.'

The poem leaves on the reader, and still more on the hearer, an impression of great vigour and freedom of expression untrammelled by the elaboration considered necessary by the later poets. Mr. Duff in his introduction aptly quotes the words of Munro: 'It has often struck me that his genius is akin to that of Milton. He displays a wonderful depth and fervour of thought, expressed in language of singular force and beauty; an admirable faculty of clear, vigorous and well-sustained philosophical reasoning; and a style equal in its purity and correctness to that of Terence, Caesar or Cicero, and superior to that of any writer of the Augustan age.'

Another great asset possessed by Lucretius is the imaginative insight and exuberant originality by which he pictures to himself and unfolds to his readers the long periods of the early struggles of mankind in the dim recesses of the past, until gradually they reached by the processes of evolution that development of civilization which culminated in the perfection of his own time ('ad summum donec venere cacumen').

Mommsen closes his sketch of Lucretius with this tribute: 'The didactic poem concerning the Nature of Things, however much in it may challenge censure, has remained one of the most brilliant stars in the poorly illuminated expanse of Roman literature.'

THE PHILOSOPHY OF EPICURUS

Epicurus based his philosophy on the axiom that experience alone was the foundation-stone of certainty: experience is to be gained from the impressions of the senses: therefore sensation is the standard of truth. Moreover, he held that the study of Nature was desirable in so far as it freed mankind from the trammels of religion and superstition.

In Physics he denied divine agency in the creation of the world, maintaining that it was due to the collision and combinations of immutable and irreducible atoms, and that the meeting of these atoms was rendered possible by the existence of void. Similarly the soul itself is composed of the lightest atoms, and is therefore of

the same nature as the body, though more agile through the excessive lightness of its composition; yet it will perish with the body and will have no future existence as it, no less than the more material and tangible world, has no divine element.

In Ethics Epicurus held the view that pleasure is the sole good and pain the sole evil: pleasure is the absence of pain. Mental pleasures are the greater, for bodily pleasures are merely ephemeral. To ensure freedom from pain he taught the value of plain living, seeing in virtue not the end of life, but rather the means to the end of life, which offered to him a state of temperate equilibrium and pleasant tranquillity, both mental and physical (*ἀταραξία*). So in Ethics, no less than in Physics, we see that all idea of higher and more spiritual life is absent, that the divine element is again lacking.

What was a philosophy to the master became a religion to the disciple, and Lucretius in his enthusiastic admiration for Epicurus preached the gospel of Epicureanism more fervently than its founder, exclaiming from the depths of his heart 'deus ille fuit, deus' (bk. 5. 8).

THE POEM 'DE RERUM NATURA'

Lucretius wished to expound the doctrine of Epicurus not merely from a desire to put before his readers his physical system, but chiefly from a deeply rooted wish to free mankind from fear of the gods and from the terrors of death which are caused by the belief in a future life: he therefore determined to explain the true nature of things.

Books one and two describe fully the physical theories of Democritus and Epicurus, dwelling on the nature of atoms and void, the chief component parts of the universe. Book three shows that the soul is a material part of man and perishes when the body dies: the next deals with the Epicurean theory of sense. The fifth book describes the creation of the world, the evolution of man and the beginnings of society. In the last book Lucretius puts before us a number of natural phenomena and curiosities in nature, probably intending to rearrange and systematize them before it was actually published.

THE SUBJECT-MATTER OF THE FIFTH BOOK

The fifth book of Lucretius opens with a panegyric on Epicurus. The poet then promises a sketch of the creation of the world and of the heavenly bodies, in order that men realizing the mortal nature of the world may not be enslaved to the belief that it was created

by the gods, who were in reality indifferent to the affairs of mankind and had no inducement to exchange their leisured happiness for the anxiety of world-making. Surely too, if the gods had made the world, it would have been both better and happier. To Lucretius Nature was the real creative power. The world and all that is in it is mortal; water, air, fire, stones, ether itself, all gradually decay and die away. Earth had its beginning and must have its end. He then goes on to describe the formation of the world out of indestructible atoms which collided and combined: the heavier particles forming the earth, the lighter ones composing the ether and the heavenly bodies, and so the earth sank and the ether rose. Next, he endeavours to describe the motions and courses of the stars and to explain the nature of the sun, which he with the Epicureans maintained was really of the size that it appeared to them. After this follows a description of the recurrence of days and nights, of the succession of the seasons, and an explanation of the causes of eclipses.

At this point our selection opens with the story of the creation of herbage, animals, birds, and lastly man produced from earth, the all-mother. Lucretius denies the possibility of beings of twofold nature, such as Centaurs, Satyrs, Scylla and the like. Then follows an account of the earliest life of man, the beginnings of social intercourse, the discovery of fire and the development of civilization. And now Lucretius launches out into a bitter indictment of religion and describes its evil effects on man. Next he tells of the discovery of the use of metals, the consequent development of war and its instruments, the cultivation of the soil, the beginnings of music, and the observance of the recurring seasons. Naturally resulting from these arts come the closer life and communion of man with man, the discovery of letters, the beginnings of history, and the progress of the arts and luxuries of life up to the elaborate civilization of his own day.

DE RERVM NATVRA

LIBER V

Earth, the mother of all, produced first herbage, then animate beings, birds, &c., lastly mankind. She also gave them natural food, as a mother does to her child. In the early days the seasons were temperate.

PRINCIPIO genus herbarum viridemque nitorem
terra dedit circum collis camposque per omnis,
florida fulserunt viridanti prata colore,
arboribusque datumst variis exinde per auras
crescendi magnum immissis certamen habenis.
ut pluma atque pili primum saetaeque creantur
quadrupedum membris et corpore pennipotentum,
sic nova tum tellus herbas virgultaque primum
sustulit, inde loci mortalia saecla creavit
multa modis multis varia ratione coorta.
nam neque de caelo cecidisse animalia possunt
nec terrestria de salsis exisse lacunis.
linquitur ut merito maternum nomen adepta
terra sit, e terra quoniam sunt cuncta creata.
multaque nunc etiam exsistunt animalia terris
imbribus et calido solis concreta vapore;
quo minus est mirum si tum sunt plura coorta
et maiora, nova tellure atque aethere adulta.
principio genus alituum variaeque volucres
ova relinquebant exclusae tempore verno,
folliculos ut nunc teretes aestate cicadae
linquunt sponte sua victum vitamque petentes.
tum tibi terra dedit primum mortalia saecla.
multus enim calor atque umor superabat in arvis.
hoc ubi quaeque loci regio opportuna dabatur,
crescebant uteri terram radicibus apti;

quos ubi tempore maturo patefecerat aetas
infantum fugiens umorem aurasque petessens,
convertebat ibi natura foramina terrae
et sucum venis cogebat fundere apertis
consimilem lactis, sicut nunc femina quaeque
cum peperit, dulci repletur lacte, quod omnis
impetus in mammas convertitur ille alimenti.
terra cibum pueris, vestem vapor, herba cubile
praebebat multa et molli lanugine abundans.
at novitas mundi nec frigora dura ciebat
nec nimios aestus nec magnis viribus auras.
omnia enim pariter crescunt et robora sumunt.

Mother earth has now in her old age ceased bearing. All things gradually change and decay, even so it is with earth.

Quare etiam atque etiam maternum nomen adepta
terra tenet merito, quoniam genus ipsa creavit
humanum atque animal prope certo tempore fudit
omne quod in magnis bacchatur montibu' passim,
aeriasque simul volucris variantibu' formis.
sed quia finem aliquam pariendi debet habere,
destitit, ut mulier spatio defessa vetusto.
mutat enim mundi naturam totius aetas
ex alioque alius status excipere omnia debet,
nec manet ulla sui similis res: omnia migrant,
omnia commutat natura et vertere cogit.
namque aliud putrescit et aevo debile languet,
porro aliud succrescit et e contemptibus exit.
sic igitur mundi naturam totius aetas
mutat et ex alio terram status excipit alter,
quod tulit ut nequeat, possit quod non tulit ante.

The earth at first produced many monsters and monstrosities, but fortunately nature did not allow these to propagate their kind, and so they gradually died out again.

Multaque tum tellus etiam portenta creare
conatast mira facie membrisque coorta,

androgynum, interutrasque nec utrum, utrimque remotum,
orba pedum partim, manuum viduata vicissim,
muta sine ore etiam, sine vultu caeca reperta,
vinctaque membrorum per totum corpus adhaesu,
nec facere ut possent quicquam nec cedere quoquam
nec vitare malum nec sumere quod foret usus.
cetera de genere hoc monstra ac portenta creabat,
nequiquam, quoniam natura absterruit auctum
nec potuere cupitum aetatis tangere florem
nec reperire cibum nec iungi per Veneris res.
multa videmus enim rebus concurrere debere,
ut propagando possint procudere saecla.

Animals which did not possess some pre-eminent quality or natural advantage soon became extinct and fell a prey to those that were stronger and better fitted for the struggle for existence. Others owe their preservation to their domestication by man.

Multaque tum interiisse animantum saecla necessest
nec potuisse propagando procudere prolem.
nam quaecumque vides vesci vitalibus auris,
aut dolus aut virtus aut denique mobilitas est
ex ineunte aevo genus id tutata reservans.
multaque sunt, nobis ex utilitate sua quae
commendata manent, tutelae tradita nostrae.
principio genus acre leonum saevaque saecla
tutatast virtus, vulpis dolus et fuga cervos.
at levisomna canum fido cum pectore corda
et genus omne quod est veterino semine partum
lanigeraeque simul pecudes et bucera saecla
omnia sunt hominum tutelae tradita, Memmi.
nam cupide fugere feras pacemque secuta
sunt et larga suo sine pabula parta labore,
quae damus utilitatis eorum praemia causa.
at quis nil horum tribuit natura, nec ipsa
sponte sua possent ut vivere nec dare nobis

utilitatem aliquam quare pateremur eorum
praesidio nostro pasci genus esseque tutum,
scilicet haec aliis praedae lucroque iacebant
indupedita suis fatalibus omnia vinclis,
donec ad interitum genus id natura redegit.

Such strange monsters as Centaurs, Satyrs, Scylla, Chimaera, &c., could never have existed outside the imagination: for in these beings of twofold nature the maturity of the one part is fully developed before the maturity of the other part; a horse would be strong and vigorous while the human element would still be tender, and again the horse would be old and beyond work when the human element had just reached its strength. So too trees and plants still retain their characteristics and cannot at any rate beyond a certain limit be transformed.

Sed neque Centauri fuerunt, nec tempore in ullo
esse queunt duplici natura et corpore bino
ex alienigenis membris compacta, potestas
hinc illinc partis ut non par esse potissit.
id licet hinc quamvis hebeti cognoscere corde.
principio circum tribus actis impiger annis
floret equus, puer haudquaquam; nam saepe etiam nunc
ubera mammarum in somnis lactantia quaeret.
post ubi equum validae vires aetate senecta
membraque deficiunt fugienti languida vita,
tum demum pueris aevo florente iuventas
occipit et molli vestit lanugine malas.
ne forte ex homine et veterino semine equorum
confieri credas Centauros posse neque esse,
aut rabidis canibus succinctas semimarinis
corporibus Scyllas et cetera de genere horum,
inter se quorum discordia membra videmus;
quae neque florescunt pariter nec robora sumunt
corporibus neque proiciunt aetate senecta
nec simili Venere ardescunt nec moribus unis
conveniunt, neque sunt eadem iucunda per artus.
quippe videre licet pinguescere saepe cicuta

barbigeras pecudes, homini quae est acre venenum.
⟨denique⟩ flamma quidem cum corpora fulva leonum
tam soleat torrere atque urere quam genus omne
visceris in terris quodcumque et sanguinis exstet,
qui fieri potuit, triplici cum corpore ut una,
prima leo, postrema draco, media ipsa, Chimaera
ore foras acrem flaret de corpore flammam ?
quare etiam tellure nova caeloque recenti
talia qui fingit potuisse animalia gigni,
nixus in hoc uno novitatis nomine inani,
multa licet simili ratione effutiat ore,
aurea tum dicat per terras flumina vulgo
fluxisse et gemmis florere arbusta suesse
aut hominem tanto membrorum esse impete natum,
trans maria alta pedum nisus ut ponere posset
et manibus totum circum se vertere caelum.
nam quod multa fuere in terris semina rerum
tempore quo primum tellus animalia fudit,
nil tamen est signi mixtas potuisse creari
inter se pecudes compactaque membra animantum,
propterea quia quae de terris nunc quoque abundant
herbarum genera ac fruges arbustaque laeta
non tamen inter se possunt complexa creari,
sed res quaeque suo ritu procedit et omnes
foedere naturae certo discrimina servant.

In the days of old men were hardier than they are now. Their food was the natural produce of the earth, their drink was the running stream. They had neither fire nor clothing and lived lawless lives. Life was full of the terrors of the unknown for them: as yet they were not confident of the superiority of man over beast.

At genus humanum multo fuit illud in arvis
durius, ut decuit, tellus quod dura creasset,
et maioribus et solidis magis ossibus intus
fundatum, validis aptum per viscera nervis,

nec facile ex aestu nec frigore quod caperetur
nec novitate cibi nec labi corporis ulla.
multaque per caelum solis volventia lustra
vulgivago vitam tractabant more ferarum.
nec robustus erat curvi moderator aratri
quisquam, nec scibat ferro molirier arva
nec nova defodere in terram virgulta neque altis
arboribus veteres decidere falcibu' ramos.
quod sol atque imbres dederant, quod terra crearat
sponte sua, satis id placabat pectora donum.
glandiferas inter curabant corpora quercus
plerumque; et quae nunc hiberno tempore cernis
arbuta puniceo fieri matura colore,
plurima tum tellus etiam maiora ferebat.
multaque praeterea novitas tum florida mundi
pabula dura tulit, miseris mortalibus ampla.
at sedare sitim fluvii fontesque vocabant,
ut nunc montibus e magnis decursus aquai
claru' citat late sitientia saecla ferarum.
denique nota vagi silvestria templa tenebant
nympharum, quibus e scibant umori' fluenta
lubrica proluvie larga lavere umida saxa,
umida saxa, super viridi stillantia musco,
et partim plano scatere atque erumpere campo.
necdum res igni scibant tractare neque uti
pellibus et spoliis corpus vestire ferarum,
sed nemora atque cavos montis silvasque colebant
et frutices inter condebant squalida membra
verbera ventorum vitare imbrisque coacti.
nec commune bonum poterant spectare neque ullis
moribus inter se scibant nec legibus uti.
quod cuique obtulerat praedae fortuna, ferebat
sponte sua sibi quisque valere et vivere doctus.
et Venus in silvis iungebat corpora amantum;
conciliabat enim vel mutua quamque cupido

vel violenta viri vis atque impensa libido
vel pretium, glandes atque arbuta vel pira lecta.
et manuum mira freti virtute pedumque
consectabantur silvestria saecla ferarum
missilibus saxis et magno pondere clavae ;
multaque vincebant, vitabant pauca latebris ;
saetigerisque pares subus silvestria membra
nuda dabant terrae nocturno tempore capti,
circum se foliis ac frondibus involventes.
nec plangore diem magno solemque per agros
quaerebant pavidi palantes noctis in umbris,
sed taciti respectabant somnoque sepulti,
dum rosea face sol inferret lumina caelo.
a parvis quod enim consuerant cernere semper
alterno tenebras et lucem tempore gigni,
non erat ut fieri possent mirarier umquam
nec diffidere ne terras aeterna teneret
nox in perpetuum detracto lumine solis.
sed magis illud erat curae, quod saecla ferarum
infestam miseris faciebant saepe quietem.
eiectique domo fugiebant saxea tecta
spumigeri suis adventu validique leonis
atque intempesta cedebant nocte paventes
hospitibus saevis instrata cubilia fronde.

And yet death was not more frequent then than now, for though many were killed and devoured by wild beasts, and others perished from hunger or from eating poisonous fruits, yet far greater numbers are slain now in a single battle, or are wrecked on voyages, while some eat themselves to death or are poisoned.

Nec nimio tum plus quam nunc mortalia saecla
dulcia linquebant lamentis lumina vitae.
unus enim tum quisque magis deprensus eorum
pabula viva feris praebebat, dentibus haustus,
et nemora ac montis gemitu silvasque replebat

viva videns vivo sepeliri viscera busto.
et quos effugium servarat corpore adeso,
posterius tremulas super ulcera taetra tenentes
palmas horriferis accibant vocibus Orcum,
donec eos vita privarant vermina saeva
expertis opis, ignaros quid vulnera vellent.
at non multa virum sub signis milia ducta
una dies dabat exitio nec turbida ponti
aequora lidebant navis ad saxa virosque.
hic temere incassum frustra mare saepe coortum
saevibat leviterque minas ponebat inanis,
nec poterat quemquam placidi pellacia ponti
subdola pellicere in fraudem ridentibus undis,
improba navigiis ratio cum caeca iacebat.
tum penuria deinde cibi languentia leto
membra dabat, contra nunc rerum copia mersat.
illi imprudentes ipsi sibi saepe venenum
vergebant, nunc dant ⟨aliis⟩ sollertius ipsi.

Soon followed the beginnings of civilization and family life, which, coupled with the discovery of fire, gradually enervated them. Love began to play its part, first between man and woman, then between parents and children, presently between neighbours, finally among nations.

Inde casas postquam ac pellis ignemque pararunt,
et mulier coniuncta viro concessit in unum
hospitium, ac lecti socialia iura duobus
cognita sunt, prolemque ex se videre creatam,
tum genus humanum primum mollescere coepit.
ignis enim curavit ut alsia corpora frigus
non ita iam possent caeli sub tegmine ferre,
et Venus imminuit viris puerique parentum
blanditiis facile ingenium fregere superbum.
tunc et amicitiem coeperunt iungere aventes
finitimi inter se nec laedere nec violari,
et pueros commendarunt muliebreque saeclum,

vocibus et gestu cum balbe significarent
imbecillorum esse aequum misererier omnis.
nec tamen omnimodis poterat concordia gigni,
sed bona magnaque pars servabat foedera caste;
aut genus humanum iam tum foret omne peremptum
nec potuisset adhuc perducere saecla propago.

The gradual growth of language is like the instinctive actions of young animals. One man could not have invented language by himself: it was the slowly developed outcome of the natural sounds and cries of man, even as animals also express different emotions by different sounds.

At varios linguae sonitus natura subegit
mittere et utilitas expressit nomina rerum,
non alia longe ratione atque ipsa videtur
protrahere ad gestum pueros infantia linguae,
cum facit ut digito quae sint praesentia monstrent.
sentit enim vis quisque suas quoad possit abuti.
cornua nata prius vitulo quam frontibus exstent,
illis iratus petit atque infestus inurget.
at catuli pantherarum scymnique leonum
unguibus ac pedibus iam tum morsuque repugnant,
vix etiam cum sunt dentes unguesque creati.
alituum porro genus alis omne videmus
fidere et a pinnis tremulum petere auxiliatum.
proinde putare aliquem tum nomina distribuisse
rebus et inde homines didicisse vocabula prima,
desiperest. nam cur hic posset cuncta notare
vocibus et varios sonitus emittere linguae,
tempore eodem alii facere id non quisse putentur?
praeterea si non alii quoque vocibus usi
inter se fuerant, unde insita notities est
utilitatis et unde data est huic prima potestas,
quid vellet facere ut sciret animoque videret?
cogere item pluris unus victosque domare
non poterat, rerum ut perdiscere nomina vellent.

nec ratione docere ulla suadereque surdis,
quid sit opus facto, facilest; neque enim paterentur
nec ratione ulla sibi ferrent amplius auris
vocis inauditos sonitus obtundere frustra.
postremo quid in hac mirabile tantoperest re,
si genus humanum, cui vox et lingua vigeret,
pro vario sensu varia res voce notaret?
cum pecudes mutae, cum denique saecla ferarum
dissimilis soleant voces variasque ciere,
cum metus aut dolor est et cum iam gaudia gliscunt.
quippe etenim licet id rebus cognoscere apertis.
irritata canum cum primum magna Molossum
mollia ricta fremunt duros nudantia dentis,
longe alio sonitu rabie restricta minantur,
et cum iam latrant et vocibus omnia complent.
et catulos blande cum lingua lambere temptant
aut ubi eos iactant pedibus morsuque petentes
suspensis teneros imitantur dentibus haustus,
longe alio pacto gannitu vocis adulant,
et cum deserti baubantur in aedibus aut cum
plorantes fugiunt summisso corpore plagas.
denique non hinnitus item differre videtur,
inter equas ubi equus florenti aetate iuvencus
pinnigeri saevit calcaribus ictus amoris
et fremitum patulis sub naribus edit ad arma,
et cum sic alias concussis artubus hinnit?
postremo genus alituum variaeque volucres,
accipitres atque ossifragae mergique marinis
fluctibus in salso victum vitamque petentes,
longe alias alio iaciunt in tempore voces,
et cum de victu certant praedaeque repugnant.
et partim mutant cum tempestatibus una
raucisonos cantus, cornicum ut saecla vetusta
corvorumque greges ubi aquam dicuntur et imbris
poscere et interdum ventos aurasque vocare.

ergo si varii sensus animalia cogunt,
muta tamen cum sint, varias emittere voces,
quanto mortalis magis aequumst tum potuisse
dissimilis alia atque alia res voce notare!

Lightning, or possibly the friction of branches in the first instance, gave or suggested to men the use of fire. The sun itself by its ripening action on fruit and corn would lead men by analogy to cook their food.

Illud in his rebus tacitus ne forte requiras,
fulmen detulit in terram mortalibus ignem
primitus, inde omnis flammarum diditur ardor.
multa videmus enim caelestibus inlita flammis
fulgere, cum caeli donavit plaga vapore.
et ramosa tamen cum ventis pulsa vacillans
aestuat in ramos incumbens arboris arbor,
exprimitur validis extritus viribus ignis
et micat interdum flammai fervidus ardor,
mutua dum inter se rami stirpesque teruntur.
quorum utrumque dedisse potest mortalibus ignem.
inde cibum coquere ac flammae mollire vapore
sol docuit, quoniam mitescere multa videbant
verberibus radiorum atque aestu victa per agros.

Men with original ideas gradually raised mankind to the higher civilization of combined life and property. At first the merit of beauty, strength, and intellect had great weight, but gradually the power of wealth became pre-eminent; the growth of ambition was often ruinous to its victims, who for their folly and greed well deserved the destruction with which Retribution often visited them.

Inque dies magis hi victum vitamque priorem
commutare novis monstrabant rebu' benigni,
ingenio qui praestabant et corde vigebant.
condere coeperunt urbis arcemque locare
praesidium reges ipsi sibi perfugiumque,
et pecus atque agros divisere atque dedere
pro facie cuiusque et viribus ingenioque;

nam facies multum valuit viresque vigebant.
posterius res inventast aurumque repertum,
quod facile et validis et pulchris dempsit honorem;
divitioris enim sectam plerumque sequuntur
quamlibet et fortes et pulchro corpore creti.
quod siquis vera vitam ratione gubernet,
divitiae grandes homini sunt vivere parce
aequo animo; neque enim est umquam penuria parvi.
at claros homines voluerunt se atque potentis,
ut fundamento stabili fortuna maneret
et placidam possent opulenti degere vitam,
nequiquam, quoniam ad summum succedere honorem
certantes iter infestum fecere viai,
et tamen e summo, quasi fulmen, deicit ictos
invidia interdum contemptim in Tartara taetra;
invidia quoniam, ceu fulmine, summa vaporant
plerumque et quae sunt aliis magis edita cumque;
ut satius multo iam sit parere quietum
quam regere imperio res velle et regna tenere.
proinde sine incassum defessi sanguine sudent,
angustum per iter luctantes ambitionis;
quandoquidem sapiunt alieno ex ore petuntque
res ex auditis potius quam sensibus ipsis,
nec magis id nunc est neque erit mox quam fuit ante.

Monarchy was overthrown and anarchy ensued, until self-interest taught man to appoint authorities responsible for the maintenance of law and order and for the suppressions of crime and blood-feuds. And now even if a man may occasionally escape punishment, he cannot avoid the stings of his own conscience.

Ergo regibus occisis subversa iacebat
pristina maiestas soliorum et sceptra superba,
et capitis summi praeclarum insigne cruentum
sub pedibus vulgi magnum lugebat honorem;
nam cupide conculcatur nimis ante metutum.
res itaque ad summam faecem turbasque redibat,

imperium sibi cum ac summatum quisque petebat.
inde magistratum partim docuere creare
iuraque constituere, ut vellent legibus uti.
nam genus humanum, defessum vi colere aevum,
ex inimicitiis languebat; quo magis ipsum
sponte sua cecidit sub leges artaque iura.
acrius ex ira quod enim se quisque parabat
ulcisci quam nunc concessumst legibus aequis,
hanc ob rem est homines pertaesum vi colere aevum.
inde metus maculat poenarum praemia vitae.
circumretit enim vis atque iniuria quemque
atque, unde exortast, ad eum plerumque revertit,
nec facilest placidam ac pacatam degere vitam
qui violat factis communia foedera pacis.
etsi fallit enim divum genus humanumque,
perpetuo tamen id fore clam diffidere debet;
quippe ubi se multi per somnia saepe loquentes
aut morbo delirantes protraxe ferantur
et celata ⟨diu⟩ in medium peccata dedisse.

The beginnings of religion. Visions and dreams first planted in man a belief in the existence of gods. And the immutable appearance of these visions would give rise to the belief in the immortality of deities. Again the unaccountable changes of seasons and celestial phenomena would naturally result in the sky being assigned to the gods as their especial province or sphere of action and consequently as their home.

Nunc quae causa deum per magnas numina gentis
pervulgarit et ararum compleverit urbis
suscipiendaque curarit sollemnia sacra,
quae nunc in magnis florent sacra rebu' locisque,
unde etiam nunc est mortalibus insitus horror
qui delubra deum nova toto suscitat orbi
terrarum et festis cogit celebrare diebus,
non ita difficilest rationem reddere verbis.
quippe etenim iam tum divum mortalia saecla
egregias animo facies vigilante videbant

et magis in somnis mirando corporis auctu.
his igitur sensum tribuebant propterea quod
membra movere videbantur vocesque superbas
mittere pro facie praeclara et viribus amplis.
aeternamque dabant vitam, quia semper eorum
suppeditabatur facies et forma manebat,
et tamen omnino quod tantis viribus auctos
non temere ulla vi convinci posse putabant.
fortunisque ideo longe praestare putabant,
quod mortis timor haud quemquam vexaret eorum,
et simul in somnis quia multa et mira videbant
efficere et nullum capere ipsos inde laborem.
praeterea caeli rationes ordine certo
et varia annorum cernebant tempora verti
nec poterant quibus id fieret cognoscere causis.
ergo perfugium sibi habebant omnia divis
tradere et illorum nutu facere omnia flecti.
in caeloque deum sedis et templa locarunt,
per caelum volvi quia sol et luna videtur,
luna dies et nox et noctis signa severa
noctivagaeque faces caeli flammaeque volantes,
nubila sol imbres nix venti fulmina grando
et rapidi fremitus et murmura magna minarum.

Men have courted misery by assigning to the gods not only supernatural powers but also the capricious use of them. The truly pious man is not the superstitious man, but rather he whose conscience is at rest. The vastness of the universe fills us with alarm, thunder terrifies us lest it be the harbinger of divine vengeance on our crimes. The mighty strength of the sea, of the wind and of earthquakes naturally instil into men's minds a heartful realization of their own insignificance.

O genus infelix humanum, talia divis
cum tribuit facta atque iras adiunxit acerbas!
quantos tum gemitus ipsi sibi, quantaque nobis
vulnera, quas lacrimas peperere minoribu' nostris!
nec pietas ullast velatum saepe videri

vertier ad lapidem atque omnis accedere ad aras
nec procumbere humi prostratum et pandere palmas
ante deum delubra nec aras sanguine multo
spargere quadrupedum nec votis nectere vota,
sed mage pacata posse omnia mente tueri.
nam cum suspicimus magni caelestia mundi
templa super stellisque micantibus aethera fixum,
et venit in mentem solis lunaeque viarum,
tunc aliis oppressa malis in pectora cura
illa quoque expergefactum caput erigere infit,
nequae forte deum nobis immensa potestas
sit, vario motu quae candida sidera verset.
temptat enim dubiam mentem rationis egestas,
ecquaenam fuerit mundi genitalis origo,
et simul ecquae sit finis, quoad moenia mundi
solliciti motus hunc possint ferre laborem,
an divinitus aeterna donata salute
perpetuo possint aevi labentia tractu
immensi validas aevi contemnere viris.
praeterea cui non animus formidine divum
contrahitur, cui non correpunt membra pavore,
fulminis horribili cum plaga torrida tellus
contremit et magnum percurrunt murmura caelum?
non populi gentesque tremunt, regesque superbi
corripiunt divum percussi membra timore,
nequid ob admissum foede dictumve superbe
poenarum grave sit solvendi tempus adultum?
summa etiam cum vis violenti per mare venti
induperatorem classis super aequora verrit
cum validis pariter legionibus atque elephantis,
non divum pacem votis adit ac prece quaesit
ventorum pavidus paces animasque secundas,
nequiquam, quoniam violento turbine saepe
correptus nilo fertur minus ad vada leti?
usque adeo res humanas vis abdita quaedam

obterit et pulchros fascis saevasque securis
proculcare ac ludibrio sibi habere videtur.
denique sub pedibus tellus cum tota vacillat
concussaeque cadunt urbes dubiaeque minantur,
quid mirum si se temnunt mortalia saecla
atque potestates magnas mirasque relinquunt
in rebus viris divum, quae cuncta gubernent?

Then followed the discovery of metals by the heating of the earth from forest fires kindled by lightning or by man's agency. The metals congealed and attracted men first by their beauty, then by their utility. They learned to fuse them and beat them into shape, at first for use in ordinary life. Originally copper was valued more highly than gold or silver: gradually gold won the premier position: even so does the wheel of Fortune make all things change from prosperity to adversity and from adversity to prosperity.

Quod superest, aes atque aurum ferrumque repertumst
et simul argenti pondus plumbique potestas,
ignis ubi ingentis silvas ardore cremarat
montibus in magnis, seu caeli fulmine misso,
sive quod inter se bellum silvestre gerentes
hostibus intulerant ignem formidinis ergo,
sive quod inducti terrae bonitate volebant
pandere agros pinguis et pascua reddere rura,
sive feras interficere et ditescere praeda.
nam fovea atque igni prius est venarier ortum
quam saepire plagis saltum canibusque ciere.
quidquid id est, quacumque e causa flammeus ardor
horribili sonitu silvas exederat altis
ab radicibus et terram percoxerat igni,
manabat venis ferventibus in loca terrae
concava conveniens argenti rivus et auri,
aeris item et plumbi. quae cum concreta videbant
posterius claro in terra splendere colore,
tollebant nitido capti levique lepore,
et simili formata videbant esse figura

atque lacunarum fuerant vestigia cuique.
tum penetrabat eos posse haec liquefacta calore
quamlibet in formam et faciem decurrere rerum
et prorsum quamvis in acuta ac tenvia posse
mucronum duci fastigia procudendo,
ut sibi tela parent, silvasque ut caedere possint
materiemque dolare et levia radere tigna
et terebrare etiam ac pertundere perque forare.
nec minus argento facere haec auroque parabant
quam validi primum violentis viribus aeris,
nequiquam, quoniam cedebat victa potestas,
nec poterant pariter durum sufferre laborem.
tum fuit in pretio magis aes aurumque iacebat
propter inutilitatem hebeti mucrone retusum.
nunc iacet aes, aurum in summum successit honorem.
sic volvenda aetas commutat tempora rerum.
quod fuit in pretio, fit nullo denique honore;
porro aliud succedit et ⟨e⟩ contemptibus exit
inque dies magis appetitur floretque repertum
laudibus et miro est mortalis inter honore.

The earliest arms were the natural weapons of nails, teeth, &c., then stones and clubs and fire: later came bronze weapons, until at last iron prevailed. Soon the horse was ridden into battle, then came chariots with two horses, later with four. At last the strength of trained elephants was employed in warfare: new death-dealing contrivances were continually being invented.

Nunc tibi quo pacto ferri natura reperta
sit facilest ipsi per te cognoscere, Memmi.
arma antiqua manus ungues dentesque fuerunt
et lapides et item silvarum fragmina rami,
et flamma atque ignes, postquam sunt cognita primum.
posterius ferri vis est aerisque reperta.
et prior aeris erat quam ferri cognitus usus,
quo facilis magis est natura et copia maior.
aere solum terrae tractabant, aereque belli

miscebant fluctus et vulnera vasta serebant
et pecus atque agros adimebant. nam facile ollis
omnia cedebant armatis nuda et inerma.
inde minutatim processit ferreus ensis
versaque in opprobrium species est falcis aenae,
et ferro coepere solum proscindere terrae
exaequataque sunt creperi certamina belli.
et prius est armatum in equi conscendere costas
et moderarier hunc frenis dextraque vigere
quam biiugo curru belli temptare pericla.
et biiugos prius est quam bis coniungere binos
et quam falciferos armatum escendere currus.
inde boves lucas turrito corpore, taetras,
anguimanus, belli docuerunt vulnera Poeni
sufferre et magnas Martis turbare catervas.
sic alid ex alio peperit discordia tristis,
horribile humanis quod gentibus esset in armis,
inque dies belli terroribus addidit augmen.

All sorts of wild animals were trained for war, but the attempts were unsuccessful, as the beasts made no distinction between friend and foe in the fury of the fray. Finally only when in despair the weaker had recourse to such allies.

Temptarunt etiam tauros in moenere belli
expertique sues saevos sunt mittere in hostis.
et validos partim prae se misere leones
cum doctoribus armatis saevisque magistris
qui moderarier his possent vinclisque tenere,
nequiquam, quoniam permixta caede calentes
turbabant saevi nullo discrimine turmas,
terrificas capitum quatientes undique cristas,
nec poterant equites fremitu perterrita equorum
pectora mulcere et frenis convertere in hostis.
irritata leae iaciebant corpora saltu
undique et adversum venientibus ora petebant
et nec opinantis a tergo deripiebant

deplexaeque dabant in terram vulnere victos,
morsibus adfixae validis atque unguibus uncis.
iactabantque suos tauri pedibusque terebant
et latera ac ventris hauribant subter equorum
cornibus et terram minitanti fronte ruebant.
et validis socios caedebant dentibus apri
tela infracta suo tingentes sanguine saevi,
permixtasque dabant equitum peditumque ruinas.
nam transversa feros exibant dentis adactus
iumenta aut pedibus ventos erecta petebant,
nequiquam, quoniam ab nervis succisa videres
concidere atque gravi terram consternere casu.
siquos ante domi domitos satis esse putabant,
effervescere cernebant in rebus agendis
vulneribus clamore fuga terrore tumultu,
nec poterant ullam partem reducere eorum;
diffugiebat enim varium genus omne ferarum;
ut nunc saepe boves lucae ferro male mactae
diffugiunt, fera fata suis cum multa dedere.
sed facere id non tam vincendi spe voluerunt,
quam dare quod gemerent hostes, ipsique perire,
qui numero diffidebant armisque vacabant.

The invention of weaving followed the discovery of iron, which was used for making the necessary instruments. At first men did the weaving, till the scoffs of the farmers drove them to resign such work to women.

Nexilis ante fuit vestis quam textile tegmen.
textile post ferrumst, quia ferro tela paratur,
nec ratione alia possunt tam levia gigni
insilia ac fusi radii scapique sonantes.
et facere ante viros lanam natura coegit
quam muliebre genus; nam longe praestat in arte
et sollertius est multo genus omne virile;
agricolae donec vitio vertere severi,
ut muliebribus id manibus concedere vellent

atque ipsi pariter durum sufferre laborem
atque opere in duro durarent membra manusque.

Nature was the chief instructress of man in agriculture. By observation man learned how to sow seeds and to graft and cultivate the land, until the present high perfection of farming has been attained.

At specimen sationis et insitionis origo
ipsa fuit rerum primum natura creatrix,
arboribus quoniam bacae glandesque caducae
tempestiva dabant pullorum examina subter;
unde etiam libitumst stirpis committere ramis
et nova defodere in terram virgulta per agros.
inde aliam atque aliam culturam dulcis agelli
temptabant fructusque feros mansuescere terram
cernebant indulgendo blandeque colendo.
inque dies magis in montem succedere silvas
cogebant infraque locum concedere cultis,
prata lacus rivos segetes vinetaque laeta
collibus et campis ut haberent, atque olearum
caerula distinguens inter plaga currere posset
per tumulos et convallis camposque profusa;
ut nunc esse vides vario distincta lepore
omnia, quae pomis intersita dulcibus ornant
arbustisque tenent felicibus obsita circum.

So too man learnt singing from birds, reed- and later flute-playing from hearing the winds blow through reed beds. Music was especially popular in the country and at the rustic festivals, and rough though it would seem to us, it gave the peasants great pleasure. Life became less simple, luxury crept in: men learned to despise acorns as food and skins of beasts as clothing: now they struggle to deck themselves with purple and gold, and allow greed of gain and ambition to mar the natural happiness of life.

At liquidas avium voces imitarier ore
ante fuit multo quam levia carmina cantu
concelebrare homines possent aurisque iuvare.

et zephyri, cava per calamorum, sibila primum
agrestis docuere cavas inflare cicutas.
inde minutatim dulcis didicere querelas,
tibia quas fundit digitis pulsata canentum,
avia per nemora ac silvas saltusque repertas,
per loca pastorum deserta atque otia dia.
haec animos ollis mulcebant atque iuvabant
cum satiate cibi; nam tum sunt omnia cordi.
saepe itaque inter se prostrati in gramine molli
propter aquae rivum sub ramis arboris altae
non magnis opibus iucunde corpora habebant,
praesertim cum tempestas ridebat et anni
tempora pingebant viridantis floribus herbas.
tum ioca, tum sermo, tum dulces esse cachinni
consuerant. agrestis enim tum musa vigebat;
tum caput atque umeros plexis redimire coronis
floribus et foliis lascivia laeta monebat,
atque extra numerum procedere membra moventis
duriter et duro terram pede pellere matrem;
unde oriebantur risus dulcesque cachinni,
omnia quod nova tum magis haec et mira vigebant.
et vigilantibus hinc aderant solacia somni,
ducere multimodis voces et flectere cantus
et supera calamos unco percurrere labro;
unde etiam vigiles nunc haec accepta tuentur
et numerum servare recens didicere, neque hilo
maiorem interea capiunt dulcedini' fructum
quam silvestre genus capiebat terrigenarum.
nam quod adest praesto, nisi quid cognovimus ante
suavius, in primis placet et pollere videtur,
posteriorque fere melior res illa reperta
perdit et immutat sensus ad pristina quaeque.
sic odium coepit glandis, sic illa relicta
strata cubilia sunt herbis et frondibus aucta.
pellis item cecidit vestis contempta ferinae;

quam reor invidia tali tunc esse repertam,
ut letum insidiis qui gessit primus obiret,
et tamen inter eos distractam sanguine multo
disperiisse neque in fructum convertere quisse.
tunc igitur pelles, nunc aurum et purpura curis
exercent hominum vitam belloque fatigant;
quo magis in nobis, ut opinor, culpa resedit.
frigus enim nudos sine pellibus excruciabat
terrigenas; at nos nil laedit veste carere
purpurea atque auro signisque ingentibus apta,
dum plebeia tamen sit quae defendere possit.
ergo hominum genus incassum frustraque laborat
semper et in curis consumit inanibus aevum,
nimirum quia non cognovit quae sit habendi
finis et omnino quoad crescat vera voluptas.
idque minutatim vitam provexit in altum
et belli magnos commovit funditus aestus.

Gradually men learned to anticipate the seasons of the year by watching the motions of the sun and moon.

At vigiles mundi magnum versatile templum
sol et luna suo lustrantes lumine circum
perdocuere homines annorum tempora verti
et certa ratione geri rem atque ordine certo.

Men gradually learned the value of social life in towns and lands were allotted to individuals. Similar influences developed the growth of alliance between cities. The inventive power of man now devised ships and navigation, the alphabet and literature.

Iam validis saepti degebant turribus aevum
et divisa colebatur discretaque tellus,
iam mare velivolis florebat puppibus; urbes
auxilia ac socios iam pacto foedere habebant,
carminibus cum res gestas coepere poetae
tradere; nec multo priu' sunt elementa reperta.

propterea quid sit prius actum respicere aetas
nostra nequit, nisi qua ratio vestigia monstrat.

Man by gradual experience has evolved various useful arts, and later many kinds of luxury, maintaining a steady if slow progress to full development, and finally reaching the perfection of the present time.

Navigia atque agri culturas moenia leges
arma vias vestis et cetera de genere horum,
praemia, delicias quoque vitae funditus omnis,
carmina picturas, et daedala signa polire,
usus et impigrae simul experientia mentis
paulatim docuit pedetemptim progredientis.
sic unumquicquid paulatim protrahit aetas
in medium ratioque in luminis erigit oras.
namque alid ex alio clarescere cordi' videbant
artibus, ad summum donec venere cacumen.

NOTES

783. **principio**, 'at the beginning of the world.' The account of the creation of the world in the first chapter of Genesis may be compared with this passage. The straightforward simplicity of both accounts and the harmony of the biblical and pagan narratives are remarkable. The early philosophers agreed that primarily all living things sprang from the earth. Similar descriptions of the creation are found at the beginning of the first book of Ovid's *Metamorphoses* and in Hesiod's *Works and Days*.

786. **arboribus**. Wakefield quotes Empedocles' theory that herbage was created first, *πρῶτα τῶν ζῴων τὰ δένδρα ἐκ γῆς ἀναδῦναι*. *certamen* is the subject to *datumst*.

787. **magnum certamen**, 'a keen rivalry.'

immissis habenis, 'in unchecked profusion': a somewhat incongruous metaphor for the riotous luxuriance of thick jungle growth. Vergil, however, has no hesitation in using the phrase in a similar context, where he describes the vine shoot as growing freely: *Georg*. ii. 364 'palmes se agit laxis immissus habenis'.

788. **primum**. Munro says that as birds have rudiments of feathers and animals have hair at birth and before they show any activity in life, so the earth at creation had herbage before it produced animate beings: Ov. *Met*. i. 44 'iussit fronde tegi silvas'.

789. **pennipotentum**: a word coined by Lucretius, found only here and in ii. 878.

791. **inde loci**: so too in l. 443; cf. l. 807 *ubi loci*, a partitive genitive; cf. *postea loci*, 'afterwards.'

mortalia saecla, 'all living creatures,' the generations of living creatures that must die.

792. **multa modis multis**. Notice the alliteration; see Introduction, The Style of Lucretius. Observe that Lucretius has no objection to the repetition of meaning in different words; cf. l. 801, l. 1002 'temere incassum frustra', l. 1050. Here *modis multis*= *varia ratione*.

793. **de caelo**. Cf. ii. 1153 'haud mortalia saecla superne aurea de caelo demisit funis in arva': the Stoics maintaining that life came from heaven let down by a golden cord. Lucretius denies that the gods had any interest or share in the creation of the world.

794. **de salsis lacunis**=*mare*; cf. ii. 1155 'nec mare nec fluctus plangentes saxa crearunt, sed genuit tellus eadem quae nunc alit ex se': Lucretius says that life could not be generated in the first instance in the sea, but required the warmth and nurturing care of mother earth.

795. **linquitur**. We find this impersonal use of *linquitur* with *ut*

and the subj. in ii. 914. Lucretius uses impersonal verbs frequently, *convenit*, *penetrabat*, *superest*, *sequitur*. Out of the four elements Lucretius has dismissed the claims of fire, air, and water to be the creative power, therefore earth alone remains as the universal mother.

797. **exsistunt** = *exoriuntur*: it is usually constructed with *ex* or *ab*, and not with the simple ablative as here.

798. **concreta**, 'are moulded into shape'; so l. 1257. In l. 1116 we have the uncompounded verb *creti*. So in Cic. *Tusc.* v. 24. 69 'initia unde essent omnia orta, generata, concreta'.

799. **minus** with *mirum*, not with *quo*.

800. **nova**: when the productive powers of the earth were still vigorous; cf. l. 907 'tellure nova caeloque recenti'.

adulta is in agreement with *plura*.

801. **alituum**. This form of the genit. plur. of *ales*, which is convenient for scansion, is found not only in Lucretius but also in Verg. *Aen.* viii. 27 and other poets.

variae=l. 825 'volucris variantibu' formis'.

802. **ova relinquebant exclusae**: i. e. were hatched. Ov. *Met.* i. 75 'cepit volucris agitabilis aer'. Cicero uses *excludere* frequently in this sense. Verg. *Georg.* ii. 338 'ver illud erat . . . et hibernis parcebant flatibus Euri, cum primae lucem pecudes hausere,' where the sense is the same.

803. **folliculos**: little leathern bags, here 'eggs'. Duff compares iv. 58 'teretes ponunt tunicas aestate cicadae'.

805. **tibi** = τοι, 'let me tell you': ethic dative: cf. l. 1209 *nobis*.

mortalia saecla, 'races of men,' but see l. 791.

806. **calor atque umor** are the two great essentials of production and growth.

807. **hoc**, 'therefore.'

ubi loci: see l. 791.

808. **terram apti**, 'embracing,' 'clinging to,' from *apiscor*. Plaut. *Capt.* iv. 1. 8 'hereditatem sum aptus'.

809. **aetas**: the age of the growing infant. MSS. have *aestas*, the warmth of the growing child. Others read *aestus*, the restless movements of the infants and the resulting heat.

810. **petessens**: an old desiderative form: note the transference of *fugiens* and *petessens* to *aetas* from *infantum*, to which the two participles properly belong.

811. **ibi**: for *illic*, i. e. *ad uteros*, 'turned the pores of the earth in that direction,' causing the flow of nutriment to the necessary places.

812. **cogebat**: the object is *foramina*: **sucum** is the object of *fundere*.

813. **consimilem**: with genitive: so too in l. 714; more usually it is constructed with the dative.

815. **impetus ille alimenti**, 'that stream,' or 'rush of nourishment,' which served to feed the child while still unborn.

816. **vapor**: the temperate warmth of the earth in the early days rendering clothing unnecessary; cf. ll. 818–9.

817. **lanugine** is the soft, velvety growth of luxuriant grass.

818. **novitas.** See on *nova*, l. 800, and on *ova*, l. 802.

820. As the world grew and developed, so also did the extremes of heat and cold gradually become more marked.

821–2. Cf. 795–6.

821. **etiam atque etiam**: understand *tibi*, 'let me tell you again and again.'

823. **humanum.** Ovid said that creation found its consummation in the birth of man. *Met.* i. 76 'sanctius his animal mentisque capacius altae deerat adhuc, et quod dominari in cetera posset: natus homo est'.

animal: here only in Lucretius in the singular.

prope certo tempore. Cf. Verg. *Georg.* ii. 338, quoted in note on *ova*, l. 802.

fudit expresses well the generous productiveness of nature. Verg. *Georg.* i. 13 'fudit equum tellus'.

824. **montibu'.** A favourite suppression of final *s* in Lucretius: the usage is common also in the earlier Latin poets: final *s*, especially in short syllables, was lightly sounded.

825. **variantibu'.** Cf. l. 801.

826. **finem**: usually masculine, but feminine in ante- and post-classical writers and in poets; cf. ll. 1213, 1432. There is only one instance of the plural with a feminine adj. Varro *L. L.* v. 1. 13.

827. **destitit.** Munro quotes ii. 1150 'effetaque tellus vix animalia parva creat quae cuncta creavit saecla'.

spatio vetusto=*senectute.*

828–9. Cf. ll. 834–5.

829. **excipere**, 'to overtake.'

830. **manet**, 'remains unchanged.' Cf. l. 1176.

831. **vertere**: intransitive (cf. iv. 1130) for the more usual *se vertere* or *verti*. In l. 1422 *convertere* is used in the same way. Lucretius uses also as neuter verbs *volvo*, *traho*, *moveo*, *teneo*, *immuto*. For the substance of ll. 831–3 cf. ll. 1276–8.

832–3. The doctrine of *ἰσονομία*, the equilibrium or balance of the world, as held by Epicurus, appears here.

833. **porro**, 'forthwith,' 'and at once.'

contemptibus. Note the use of the plural as in l. 1278.

835. **alter**: for *alius*; cf. l. 829.

836. The earth ceases its old functions and develops fresh ones more suitable to the needs and the progress of civilization, and so the equilibrium is maintained. Observe how similar this is to the opinions of modern science on the variations and extinction of certain species. With *possit* repeat *ut*.

838. **mira facie**: descriptive ablative.

839. **androgynum**, 'the man-woman,' a being combining the two sexes: the word is borrowed from the Greek, as also the synonym *hermaphroditus*. The Latin word is *semivir* or *semimas*.

interutrasque. So in l. 472, an adverb; cf. *interea*. For the form of the termination Munro compares *alias* and *foras*. Note *interŭtrasque* followed by *ūtrum*, *ūtrĭmque*. Cf. ll. 1163–4 *sācra*, *săcra*, and note.

nec utrum = *neutrum*; *nec* and *ne* were the old forms of the negative; cf. *neglego*, *nec-lego*, not to regard, disregard.

840. **orba**: more commonly constructed with the ablative. Verg. *Georg.* iv. 309 'visenda modis animalia miris, trunca pedum primo'.

viduata: also far more usually constructed with the ablative; cf. ii. 843 'corpora secreta teporis'; i. 1041 'materies aversa viai'.

vicissim = *contra*.

841. **vultu** = *luminibus*, *oculis*. Cf. Verg. *Aen.* xii. 70 'figitque in virgine vultus'. These monstrosities of nature still recur from time to time.

842. **adhaesus** is a Lucretian word.

844. **quod foret usus**. So in iv. 831 'quae foret usus': *quod* is accusative of reference (in place of the usual ablative) or else *sumere* is understood; Plaut. *Truc.* v. 10 'puero opus est cibum'. Cato *R. R.* 15 '(calcis) opus est unum modium'. Duff compares l. 1053 'quid sit opus facto,' 'in respect of what there is need of action.' MS. has 'quod volet usus'.

846. **absterruit**. So in iv. 1233 'nec divina satum genitalem numina cuiquam absterrent' = σοβεῖν, 'frighten away,' hence, 'remove.'

847. **cupitum aetatis florem**. Cf. iii. 770 'cupitum aetatis tangere florem' = *crescere*, i. e. they perished before reaching maturity. So in Greek we find in Pindar ἄωτος ζωᾶς, 'the flower or prime of life.'

848. **Veneris res**, 'union of love' or 'marriage.' The Romans were fond of using proper names instead of common nouns; cf. Ter. *Eun.* iv. 5. 6 'sine Cerere et Libero friget Venus', 'Love in a hut with water and a crust,' Keats. We find the same proverb in Cic. *N. D.* ii. 23. 60.

849. All conditions must be favourable to ensure procreation.

concurrere, 'happen at the same time,' 'meet together.'

debere is the only instance of hypermeter in Lucretius: it is not uncommon in Vergil, but is practically unknown in Greek hexameters.

850. Notice the strong alliteration: in l. 856 we find a more emphatic instance still. The first syllable of both the verb and the subst. *propago* is variable; cf. l. 856.

procudere: i. e. to establish the continuity: the metaphor is from forging metal, 'to weld on the anvil of life the links of future generations.' Cf. Plaut. *Ps.* ii. 2. 20 'haec mihi incus est: procudam ego hodie hinc multos dolos'.

855. **tum**: in the old days when life was a struggle and only the best fitted survived, exactly as modern science teaches us.

animantum: all kinds of living creatures.

856. Cf. l. 850.

857. The old pronunciation of the Latin *v* as the English *w* would emphasize the alliteration of such lines as these. 'Drinking in the breath of life.' Verg. *Aen.* i. 546 'si vescitur aura aetheria'.

858. These three qualities represent the fox, the lion, and the deer mentioned in ll. 862–3.

aut denique, 'or even'; the adverb implies that this physical

quality is a gift inferior to the two mental qualities. Take *est* with *tutata*.

859. **ex ineunte aevo**=a *primis annis*.

reservans, 'preserve,' i.e. keep back for something better than death.

860. Here the domestic animals which are mentioned in ll. 864–6 are meant, such as dogs, horses, sheep, and cattle.

862. **principio**, 'in the first place,' not as in l. 783.

saecla: sc. *animalium* not *hominum*. Verg. *Aen.* iv. 154 'atque agmina cervi pulverulenta fuga glomerant'.

864. **levisomna**: ἅπαξ λεγ. Cf. Hor. *Od.* iii. 16. 2 'vigilum canum tristes excubiae munierant'.

cum has the same force as the simple ablative and this use is common in Lucretius; cf. l. 904. Duff adds l. 352 'solido cum corpore'. He mentions also the instance in Homer of the faithful dog Argos, and remarks that Plato finds in the dog the qualities proper for the guardians of his ideal State. *Republ.* ii. 375, 376.

865. **veterino**: more fully in l. 890 'veterino semine equorum', horses: the word is contracted from *vehiterinus* from *veho*, a beast of burden, rather than a draught-animal.

866. **bucera**: from the Greek βούκερως: in ii. 663 we have 'buceriaeque greges'. Ov. *Met.* vi. 395 'lanigerosque greges armentaque bucera pavit'.

867. **Memmi.** Gaius Memmius was a Roman noble of distinguished birth: after holding the praetorship he served as propraetor of Bithynia. It was to this Memmius that Lucretius dedicated his poem.

868. **secuta**: in the sense of *consequor* or *peto*, it governs *pabula parta*.

869. **suo sine labore**: man supplies domestic animals with food prepared by his own labour in return for the labour and services performed by them.

871. **quis**: i.e. *animalia quibus*.

horum: i.e. no especial qualities to recommend them. The following lines illustrate Darwin's theory of the survival of the fittest.

872. **sponte sua.** So in ll. 938, 961; originally, 'of their own free will,' here, 'by their own efforts.' Plaut. *Truc.* ii. 6. 45 'nequeo pedibus mea sponte ambulare'.

873. **quare**=*quamobrem*: practically ablative of the cause.

874. **pasci**: as βόσκειν of maintaining inferiors or those unable to help themselves: of animals, slaves, and even of aged parents, whereas *alere*=τρέφειν is used in a more complimentary sense. Hor. *Sat.* i. 6. 103 'plures calones atque caballi pascendi'; Petron. 57 'viginti ventres pasco et canem'.

esseque. In Augustan poetry it was very exceptional to attach *que* or *ve* to a word ending in a short *e*: Lucretius, however, uses it frequently: l. 1021 *muliebreque*, l. 1052 *suadereque*, l. 1289 *aereque*.

875. **scilicet**: *scire licet* rather than *sci* (imperative) *licet*. See

Lindsay's *Short Historical Lat. Grammar*, p. 124. In meaning it is equivalent to δηλονότι, 'you must know.'

aliis: *dativ. commodi.*

praedae lucroque: predicat. dat. See on l. 960.

876. **indupedita**: for *impedita*, as in i. 240, ii. 102, iv. 70. Lucretius has also *indugredi*, *induperator* l. 1227, and *indu*. In vi. 890 *endo mari* for *in mari*; cf. ἔνδον.

fatalibus vinclis, 'bonds of destiny,' i. e. their natural disadvantages which hindered them in the struggle for existence.

878. **fuerunt**: to be scanned *fŭĕrūnt*: the *e* of the third perfect plural is sometimes short in poetry; cf. *dedĕrunt*, *stetĕrunt*, *tulĕrunt*.

879. **duplici natura**: descriptive ablative.

881. **potestas partis ut non par esse potissit**, 'so that the power in creatures born of two different species cannot be alike.' In the next few lines Lucretius' meaning becomes quite clear. We find *potesse* and *potis est* in Lucretius; here we have the subjunctive. See *possum*, *init*, Lewis and Short.

hinc illinc: the two component parts or different natures.

partis is the dative of the participle from *pario*.

882. **hinc**, 'from the following arguments.' This line occurs in iv. 53. Lucretius is here addressing not Memmius so much as any chance reader.

883. **principio**, 'to begin with.' *circum . . . actis*, tmesis is common in Lucretius, as in all early poets, also in Greek; cf. ll. 1128, 1268, 1374. Cf. Butler's *Hudibras*, Pt. i. c. i. 328 'that old Pyg—(what d'ye call him) malion. Hooker *Eccl. Polit.* v. 'creatures of what kind soever.'

885. **quaeret**, 'will cry out for.' Ov. *Met.* vi. 342 'uberaque ebiberant avidi lactantia nati'.

886. **aetate senecta**: so in l. 896 the adjective is rare. In iii. 772 'membris exire senectis'.

888. **tum demum**: very emphatic, 'then, and not till then.'

pueris: the dative of the party interested.

889. Cf. Verg. *Aen.* x. 324 'flaventem prima lanugine malas Clytium'.

890. **ne credas**: final not prohibitive; cf. l. 1091.

veterino semine. Cf. l. 865.

neque is more forcible than the simple conjunction *et*, as it recalls *ne credas* to the reader's mind.

892. **succinctas**. Verg. *Ecl.* vi. 74 'Scyllam . . . succinctam latrantibus monstris . . . nautas canibus lacerasse marinis'. The Latin poets represent Scylla as more terrifying than the Scylla of Homer, *Od.* xii. 86–100.

895. **sumunt** = *consequuntur*, 'reach their full bodily strength.' With **proiciunt** understand *robora*.

897. **Venere**. Cf. l. 848 = *stimulis amoris*.

unis: we find the plural in iii. 616 'unis sedibus'. Cic. *Flacc.* 63 'unis moribus vivunt,' 'are endowed with similarity of habits.'

898. **neque sunt**: a second relative sentence parallel with **quae neque . . .** would have been more grammatical.

899. **cicuta.** iv. 640 'nobis veratrum est acre venenum, at capris adipes et coturnicibus auget'. One man's meat is another man's poison.

900. **barbigeras.** Cf. vi. 970 'barbigeras capellas'. The word is coined by and found only in Lucretius.

903. **visceris,** 'flesh,' all that lies between the skin and bones, so in ll. 928, 993. Translate in the following order 'visceris et sanguinis quodcumque in terris exstet'.

904. **qui:** old ablative=*quomodo*. For **triplici cum corpore** cf. l. 864.

905–6. This description is an exact imitation of a passage in Homer, *Il.* vi. 181–2 *πρόσθε λέων, ὄπιθεν δὲ δράκων, μέσση δὲ χίμαιρα δεινὸν ἀποπνείουσα πυρὸς μένος αἰθομένοιο.*

media ipsa, 'in the middle a goat, from which it receives its name:' note the full emphasis of ipsa.

foras: of motion outside, while *foris* is of rest outside; the two, however, are frequently confused.

907. See l. 800 and note.

908. **qui fingit:** i. e. Empedocles who believed in the existence of bulls with men's heads and men with bulls' heads. Ov. *Ar. Am.* ii. 24 'semibovemque virum, semivirumque bovem'.

animalia: i. e. *monstra.*

910. **licet:** with subj. without *ut*, 'may babble out': *licet* must be repeated with *dicat* in the next line. In l. 792 we have 'varia ratione'.

911. **aurea:** to be taken predicatively: streams such as the river Pactolus in Lydia. Verg. *Aen.* x. 142 'Pactolus irrigat auro'. So too in *Georg.* ii. 165 'haec eadem argenti rivos aerisque metalla ostendit venis atque auro plurima fluxit'. The river Hermus had the same qualities. *Georg.* ii. 137 'auro turbidus Hermus'. See ll. 1255–6, which recall Milton, *Paradise Lost*, xi. 565 'Two massy clods of iron and brass Had melted, whether found where casual fire Had wasted woods on mountain or in vale, Down to the veins of earth, thence gliding hot To some cave's mouth.'

912. **arbusta:** for *arbores*, as *animantum* for *animalium*, for the sake of the metre. Cf. l. 1378.

suesse: for *suevisse*; cf. l. 53 *suerit.* Perhaps the idea originated in the glistening of the morning dew on the leaves in the sunlight.

913. **impete,** 'size and strength': more usually of strength alone. This word is used only in the genitive and ablative.

914. **pedum nisus ponere,** 'plant his footsteps firmly': contrast vi. 834 'pinnarum nisus inanis,' of the unsure flight of birds. For the idea of ll. 913–5 compare i. 199–201 'cur homines tantos natura parare non potuit, pedibus qui pontum per vada possent transire et magnos manibus divellere montis?'

vertere, 'to whirl' or 'dash,' transitive.

918. **signi:** partitive genit.

compacta, 'united into a single body.'

920. **nunc quoque:** definitely opposed to *tum*, l. 911.

921. **laeta.** l. 1372 'vineta laeta,' 'luxuriant.'

922. **complexa**: passive as in ii. 154 'complexa meant inter se'. See *complector, fin.*, Lewis and Short.

924. **discrimina**, 'their distinctive differences.'

926. **quod**=*quippe quod.*

928. **fundatum**, 'built on a firm foundation,' or, 'framework.' Wakefield compares Arnobius, 'ossibus illis fundata sunt corpora et nervorum colligatione devincta.' **viscera**, 'solid flesh,' as in l. 903.

929. Order 'nec quod facile caperetur': consecutive relative, 'not likely to be incapacitated': for this use of *capi* see Lewis and Short *capio* I. 1. e.; cf. iv. 1022 'mentibu' capti'. Cic. *Tusc.* v. 40. 117 'oculis et auribus captus'.

ex aestu: i. e. by any results arising from heat.

930. **labi**: ablative as *igni*, ll. 1250, 1254.

931. **volventia lustra**: accus. of duration of time. *volventia* for *se volventia*; see l. 831.

932. **vulgivago**: a Lucretian word: also in iv. 1071 with Venus.

933. **moderator**: also found with *equorum* or *arundinis*; i. e. agriculture was still unknown, see note on l. 945. Wakefield compares Verg. *Aen.* viii. 316 'queis neque mos nec cultus erat'.

934. **scibat**: for *sciebat*, so ll. 949, 953 *scibant*, l. 1003 *saevibat*, l. 1324 *hauribant*. Duff adds *accibant*, l. 996. 'know how to'=*ἐπίσταμαι* with infinitive.

molirier. Cf. Verg. *Georg.* i. 494 'agricola incurvo terram molitus aratro'. Note the archaic infinit., a favourite usage with Lucretius; cf. l. 979 *mirarier*, l. 1023 *misererier*, l. 1199 *vertier*, l. 1250 *venarier*, ll. 1298, 1312 *moderarier*, l. 1379 *imitarier*.

935. **defodere**: l. 1366 'nova defodere in terram virgulta'= *inserere.*

936. **falcibu'**: here 'pruning-hooks,' a straighter and stronger instrument than the sickle. For omission of *s* see l. 824.

938. **sponte sua**. Cf. l. 872.

placabat, 'contented.' So in Hor. *Sat.* ii. 8. 5 'quae prima iratum ventrem placaverit esca'. Of quenching the thirst, Martial, i. 49 17 'avidam Dercenna placabit sitim'. We find a similar description of the rudeness of early life in Ov. *Met.* i. 103 'contentique cibis nullo cogente creatis arbuteos fetus montanaque fraga legebant cornaque . . . et mora . . . et glandes'.

donum = *εὐεργέτημα*, i. e. a boon bestowed by mother-earth and the sun.

939. **glandiferas . . .**: Verg. *Georg.* i. 148 'cum iam glandes atque arbuta sacrae deficerent silvae'.

941. **arbuta**: the fruit of the wild strawberry. Verg. *Georg.* ii. 519 'venit hiems: teritur Sicyonia baca trapetis, glande sues laeti redeunt, dant arbuta silvae'. Munro says that in December certain districts of the Peloponnese are bright with the scarlet fruit.

plurima etiam (=et) **maiora**, 'in great plenty and finer than nowadays.'

944. Though the food was coarse, yet there was abundance of it; cf. Soph. *El.* 354 *οὐ ζῶ; κακῶς μέν, οἶδ', ἐπαρκούντως δ' ἐμοί.*

945. **sedare sitim . . . vocabant**: see passages quoted on l. 938. Ov. *Fast.* ii. 293 'pro domibus frondes norant, pro frugibus herbas: nectar erat palmis hausta duabus aqua: nullus anhelabat sub adunco vomere taurus; nulla sub imperio terra colentis erat'. Verg. *Aen.* viii. 316 'queis neque mos nec cultus erat'. Notice the infin. after *vocare* instead of *ut*. Hor. *Od.* ii. 18. 38 'hic levare functum pauperem laboribus vocatus'.

946. **aquai**: the archaic genitive of which Lucretius is so fond. l. 1099 *flammai*, l. 1124 *viai*.

947. **claru'**: of sound here and not of appearance: so appropriately with *citat*: cf. iv. 711 'clara voce vocare'.

948. **vagi**: understand *nostri maiores*. The *silvestria templa* are well described by Verg. *Aen.* i. 166 'fronte sub adversa scopulis pendentibus antrum, intus aquae dulces vivoque sedilia saxo, Nympharum domus'. For the asyndeton see ll. 1063–4.

949. **scibant**: see on *scibat* l. 934. Notice the inversion of **quibus e**. Observe the repetition of the letters *l*, *s*, and *u*, 'umori' fluenta lubrica proluvie larga lavere umida saxa, umida saxa, super viridi stillantia musco'. See note on l. 989.

lavere: the present infinitive for the more usual *lavare*, governed by *scibant*. Munro takes *lubrica* with *fluenta*, which is preferable to taking it with *saxa*, as *saxa* is not only separated from it by a number of words but also has its own epithet: again the second *umida saxa* loses force if it is merely a partial repetition of the whole phrase 'lubrica umida saxa'. For the repetition or *ἐπανάληψις* see l. 1402. In iii. 12 we find 'aurea dicta, aurea'.

951. **stillantia**: with *fluenta*.

952. **scatere**: here third conjugation, usually second: the infinit. depends on *scibant*. In l. 598 'scatere atque erumpere lumen', of the light of the sun.

953. **igni tractare**, 'to mould,' or 'prepare with fire': for **igni** cf. *labi* l. 930. We find an account of the discovery and benefits of fire in Aesch. *P. V.* 7 *παντέχνου πυρὸς σέλας θνητοῖσιν ὤπασεν*, and in 252 *πῦρ ἐγώ σφιν ὤπασα . . . ἀφ' οὗ γε πολλὰς ἐκμαθήσονται τέχνας*. See the passages on fire l. 1011 and ll. 1091–1104; for **scibant** see l. 934.

954. **spoliis**: i.e. skins (Duff): *exuviae* is often used in this sense. So we have *spolium leonis*, the skin of the Nemean lion: *spolium pecudis*, the golden fleece: *spolium viperei monstri*, Medusa's head. Cf. l. 1011.

955. We have a similar account of caves used as dwellings by primitive man in Aesch. *P. V.* 452 *κατώρυχες δ' ἔναιον . . . ἄντρων ἐν μυχοῖς ἀνηλίοις*, and in Ovid. *Met.* i. 121 'domus antra fuerunt et densi frutices et vinctae cortice virgae'. Munro says that *nemora* are cultivated woods or groves, while *silvae* are wild forests, but that the distinction is often lost sight of.

957. Notice the alliteration.

958. Neither the advantages nor the claims of society were recognized yet.

inter se: there was no idea of social life and obligation, and

consequently no thought of right or law between man and man. Verg. *Aen.* viii. 316 'queis neque mos nec cultus erat'.

scibant: as in l. 934.

960. **praedae**: either a partitive genitive depending on *quod* or possibly a predicative dative as in l. 875 'praedae lucroque iacebant'.

cuique is masculine.

961. **sponte sua**, 'at his own discretion.'

quisque: note the emphatic force of *quisque* repeated after *cuique*: to be strong and to exert oneself solely for one's personal advantage was a characteristic of the early days among men as much as among beasts: see ll. 871–7, especially l. 875.

962. **in silvis**: as if they were mere beasts. Verg. *Aen.* iv. 165 'speluncam Dido dux et Troianus eandem deveniunt: prima et Tellus et pronuba Iuno dant signum'; also *Aen.* iv. 124.

963. **quamque**: sc. *mulierem*. Notice the alliteration in the next line.

965. **pretium**: the ἕδνα or dowry of the earliest bridegrooms is conceived as being a simple gift, but one that would strongly appeal to the simple desires of the age. Notice **atque** followed by **vel**: so in iii. 551 'atque oculos naresve'.

966. Men had to rely on their natural forces in those days, and consequently these were highly developed as among the Red Indians, especially sight, hearing, smell, speed and strength.

968. **missilibus**, 'with stones for throwing.' Cf. Stat. *Theb.* viii. 524 'uni sibi missile telum', a weapon which he alone can hurl.

magno pondere, upon which *clavae* depends, is ablative of description: cf. Caes. *B. G.* ii. 29 'magni ponderis saxa', genitive of description.

969. **multa, pauca**: objects to the verbs.

vitabant pauca: in l. 985 'spumigeri suis adventu validique leonis cedebant'.

970. **sūbus**: the dat. plur. is also *sŭbus* and *suibus*. Others read in this passage *sŭbŭ' sic*, 'just as they were,' without any elaborate preparations; *sic* = *sicut erant*. Munro quotes Ov. *Fast.* vi. 331 'Vesta iacet placidamque capit secura quietem, sicut erat, positum caespite fulta caput'.

971. **nuda dabant**: a brilliant restoration by Lambinus for MS. *nudabant*.

capti, 'overtaken' or 'surprised,' at a distance from the cave which they had made their home.

972. **circum** is adverbial and does not govern *se*; cf. note on *subter*, l. 1324. In order to escape being sighted or scented by wild beasts rather than to protect themselves from the cold. Similarly in the next line they avoid attracting the notice of animals by their cries, but rather endure in silence waiting for the break of day. Others suggest that the early races feared that the sun had actually died and would not return, an impossible view, for they had been accustomed to the setting and rising of the sun from their

earliest days, and would have been far more surprised if one day the sun had never set at all.

977. **a parvis**=*a primis annis*.

979. Notice how Lucretius piles up his verbs to emphasize the impossibility of the view. In vi. 727 he actually has 'fit uti fiat'.

mirarier: see *molirier* l. 934.

981. **detracto**: as if the disappearance of the sun had been caused by some evil spirit or by enchantments. Cf. Verg. *Ecl.* viii. 69 'carmina vel caelo possunt deducere lunam'. Hor. *Epod.* v. 45 'Thessala lunam caelo deripit'.

982. **curae**: predicative dative.

983. **quietem**, 'repose.' There is no need to suppose that it is either 'time of rest' or 'place of rest': the mere fact that their vigilance was relaxed often proved fatal to them.

986. **intempesta nocte**, 'in the dead of night.' Verg. *Georg.* i. 247 'intempesta silet nox'; *Aen.* iii. 587 'nox intempesta'. Conington compares *νυκτὸς ἀωρί*. On *intempestus* Varro says 'cum tempus agendi est nullum'.

cedebant, 'surrendered.'

987. The savage guests were the uninvited boar and lion.

988. **nimio plus**: usually 'too much,' here, 'much more,' a comparative use. In vi. 1196 'nec nimio post'. Plaut. *Bacch.* i. 2. 14 'quem ego sapere nimio censui plus quam Thalem'.

989. Notice the alliteration of the liquid *l*. Duff compares Gray's *Elegy*, 'nor cast one longing lingering look behind.'

990. **unus quisque**, 'one or other.'

magis: sc. *quam nunc*.

991. **haustus**, 'rent'; cf. note on l. 1324 *hauribant*: so we have in l. 1069 'suspensis teneros imitantur dentibus haustus'. See Lewis and Short, *haurio*, I. B. 2.

992. i. e. the lairs where they had made their homes; cf. l. 955.

993. Notice the alliteration: the use of *v* (with a *w*-sound) was felt to convey pathos. Verg. *Aen.* vi. 833 'neu patriae validas in viscera vertite vires'. For **viscera** see on l. 903. Munro quotes Spenser's *Faery Queene* ii. 8. 16 'but be entombed in the raven or the kight.' Gorgias has *γῦπες ἔμψυχοι τάφοι*.

994. **adeso**, 'cruelly torn,' literally 'eaten into.'

995. **posterius**=*ὕστερον*, 'ever after.'

996. **accibant**: see on *scibat*, l. 934.

Orcum: god of the lower world and so the Lord and Giver of Death.

997. **donec**. Lucretius has not used in any other passage the construction of the pluperfect after *donec*, and Munro suggests that possibly *privarunt* should be read or that perhaps the verb is attracted into the pluperfect by the tense of *servarat*.

vermina. *Fest.* p. 375, Müll. 'vermina dicuntur dolores corporis cum quodam minuto motu quasi a vermibus scindatur. Hic dolor Graece *στρόφος* dicitur.' As *στρόφος* from *στρέφω*, so in Latin we find *tormina* from *torqueo*. For the *v* alliteration see l. 993.

998. **vellent**, 'wanted' or 'needed,' so as to be healed. Wake-

field mentions Bentley's citation of Sil. It. xi. 166 'medicinam vulnera poscunt'.

999. **at**: marking a strongly contrasted thought leading off from the preceding idea. Perhaps Lucretius is thinking of the bloodshed of the civil wars during his early life.

1000. In l. 95 we have 'una dies dabit exitio'. So in Enn. *Ann.* 8 '(milia) multa dies in bello conficit unus'.

1001. We have a picture of the reckless greed of merchants in Hor. *Od.* i. 1. 17 '(mercator) mox reficit rates quassas, indocilis pauperiem pati'.

lidebant, 'dashed'; the verb *lido* is found here only, but it is frequent in compounds *allido, collido, illido.*

1002. **hic**=*tum.*

temere incassum frustra, 'without aim, purpose, or result.' These three adverbs occur in ii. 1060 and are practically synonymous: see note on *multa modis multis*, l. 792.

1003. **saevibat**: see note on *scibat*, l. 934.

ponebat=*deponebat.*

inanis: to be taken predicatively.

1004. Notice the strong alliteration and also the repetition of *pellacia, pellicere* for the sake of emphasis. The sentiment is similar in ii. 559 'subdola cum ridet placidi pellacia ponti', but without any idea of treachery in i. 8 'tibi rident aequora ponti'.

1005. **in fraudem**, 'to his ruin.'

1006. 'When reckless seacraft was still a locked mystery to the ships,' as in the days before shipbuilding described in Ov. *Met.* i. 94 'nondum caesa suis peregrinum ut viseret orbem montibus in liquidas pinus descenderat undas, nullaque mortales praeter sua litora norant,' when men did not travel beyond their immediate neighbourhood.

1007. **tum deinde**, 'it was then too that . . .'

penuria=*inopia*, σπάνις.

1008. **mersat**: the object is *homines* understood. Munro seems to take *mersat* as if it were intransitive: 'sinks into ruin.' The meaning is that men dig their graves with their teeth, greater numbers dying from overeating than from want of food.

1009. Men used in their ignorance the juice of poisonous berries as a drink or possibly as a medicine. Duff quotes Verg. *Georg.* ii. 152 'nec miseros fallunt aconita legentes'.

1010. **vergebant**, 'poured out for themselves': so in Stat. *Theb.* vi. 211 'spumantesque mero paterae verguntur.' *vergere* means to tilt the vessel so as to pour out the contents.

nunc dant aliis: a correction for the MS. reading *nudant.* Munro suggested 'nurui nunc dant': 'now with nicer skill men give it to their son's wife instead,' i. e. to obtain her dowry. He quotes in support of his emendation Juv. xiv. 220 'elatam iam crede nurum, si limina vestra mortifera cum dote subit.' A passage might also be added from Ov. *Met.* i. 147 'lurida terribiles miscent aconita novercae'. Palmer proposed 'medici nunc dant . . . usi': 'now doctors prescribe and administer it,' with the meaning that

though a large dose would be fatal, a doctor could use a poison in smaller quantities with good effects. But this is not so pointed and involves a further departure from the MSS.

1011. See the notes on ll. 953, 955.

pellis = *spolia ferarum*; see l. 954.

1012. The beginnings of the formation of the family. Munro supplied the italicized line to complete the sense, which was defective owing to the loss of a verse.

lecti socialia iura, 'the ties and laws of wedlock.'

1015. **curavit ut** = *effecit ut.*

alsia, 'cold,' once in Lucretius, twice in Cicero: the word is connected with *algeo, alsi.*

ignis: see l. 953. Darwin says the discovery of fire was probably the greatest man ever made, excepting that of language.

1016. Contrast this with the hardier habits of l. 970–2, 'no longer as before.'

1017–8. Children began to take freer liberties with their parents.

1019. **amicitiem**: for *amicitiam.* l. 1047 *notities*, l. 1267 *materiem*; iii. 59 *avarities.* This is the beginning of the social contract of mutual advantage between men.

1021. **commendarunt**, 'claimed indulgence for.'

muliebreque: see note on *esseque*, l. 874.

1022. **balbe**: with halting, stammering speech.

1023. **miserierier**: see note on *molirier*, l. 934.

1024. **omnimodis.** Cf. 'multimodis (multi' modis), mirimodis (miri' modis)': so this should be *omnibumodis.*

1025. **bona magnaque pars**: so in Ter. *Eun.* i. 2. 43 'bonam magnamque partem.' Duff compares 'pleno bene,' l. 708.

caste = *inviolata.*

1026. **aut** = εἰ δὲ μή, 'otherwise.'

1027. Cf. ll. 850, 856.

1028. There is a good description of the early life of mankind in Hor. *Sat.* i. 3. 99–111:

> 'cum prorepserunt primis animalia terris,
> mutum et turpe pecus, glandem atque cubilia propter
> unguibus et pugnis, dein fustibus, atque ita porro
> pugnabant armis quae post fabricaverat usus,
> donec verba quibus voces sensusque notarent
> nominaque invenere: dehinc absistere bello,
> oppida coeperunt munire et ponere leges,
> ne quis fur esset, neu latro, neu quis adulter.
> . . . . . .
> iura inventa metu iniusti fateare necesse est.'

1029. **expressit** = *emittere coegit*, 'wrested,' 'elicited.' Lucretius holds the view that the names were given gradually by a natural instinct and desire on the part of the individual to express his wishes and feelings. Contrast with this view the account given in Genesis, where the story says that all animals were brought to Adam and he gave each one its name.

1030. 'In a very similar way inability to speak is in its turn seen to prompt infants to point and to beckon.'

infantia: Hor. *Sat.* ii. 5. 39 'seu rubra Canicula findet infantes statuas', 'statues that cannot speak.'

1032. **cum facit ut**, 'when it causes them to.'

sint: the subjunctive is possibly due to the feeling in Lucretius' mind that their reason for pointing is their wish to ask some question about the object: *sint* then is an indirect question.

1033. **vis**: for *viris* as in ii. 586, iii. 266.

vis: to be taken either (1) with *sentit*, 'as to his powers each man feels . . .'; this is probably the correct way of taking the passage, owing to the position of *quisque* between *vis* and *suas*, as it would be distinctly awkward to extract *quisque* from its enclosed place and to separate it from the two words that confine it: or (2) with *abuti*, which in Plaut. and Terence frequently governs the accusat. So we have in l. 358 'neque fungitur hilum'. Of *abutor* Duff says = ἀποχρῆσθαι here, often = καταχρῆσθαι.

quoad is scanned by synizesis as one long syllable; cf. ll. 1213, 1433.

1034. **vitulo**: dative of possessor.

1035. **illis**: i.e. *cornibus*. Hor. *Od.* iii. 13. 3 'haedo, cui frons turgida cornibus primis et Venerem et proelia destinat'.

inurget: a rare word, 'pushes' or 'butts'. Hor. *Sat.* ii. 1. 52 'dente lupus, cornu taurus petit', and Verg. *Ecl.* iii. 87 '(taurus) cornu petat'. Wakefield adds Ov. *Hal.* 2 'vitulus sic nempe minatur qui nondum gerit in tenera iam cornua fronte; sic dammae fugiunt, pugnant virtute leones, et morsu canis, et caudae sic scorpios ictu'. That is, in all animals we find that instinct causes them to act in the way natural to their kind, even before they have been taught by actual experience: this is worked out in the next few lines.

1036. **scymni**: a word characteristically chosen by Lucretius as being parallel to *catuli*.

iam tum, 'even at this early age.'

1040. **tremulum** well expresses the uncertain efforts of half-fledged birds in their earliest attempts at flight.

auxiliatum: ἅπ. λεγ. = *auxilium*. Cf. *summatum*, l. 1142.

1041. **proinde**: dissyllabic, 'and so.'

aliquem, 'one distinct person.'

inde refers back to the *aliquem*, 'and it was from him men learned': cf. the use of *inde*, l. 1093.

putare is subject to *est*.

1045. Munro compares the same phrase in ll. 756, 765. In full it is equivalent to *tamen tempore eodem*: the phrase is to be taken with *putentur*.

non quisse (= *quivisse*): for *nequivisse*.

1047. **fuerant**: the pluperfect of the auxiliary marks a very strong pluperfect time.

notities: see note on *amicitiem*, l. 1019. This is a poetical, though not a strictly accurate translation of Epicurus' πρόληψις,

which is preconception based on knowledge gained from former experiences; see the Introduction, 'Philosophy of Epicurus.' Cf. l. 182 'notities divis hominum unde est insita primum, quid vellent facere ut scirent animoque viderent?' i.e. what pattern for the creation of man could be present in the minds of the gods to enable them to realize what was their real object and wish? for if they had no preconceived idea of man, they could have no pattern to follow in their work of creation. So too if man had no preconception of voice he never either could or would have used it.

1048. **huic**: i.e. the *aliquem* of l. 1041.

1049. See note on 1047. Notice *scirēt* lengthened by the emphatic beat: so in English poetry, especially in the hymns we have frequent instances of syllables usually short being lengthened by the beat. The only other example in Lucretius is 'fulgēt' ii. 27.

1050. **cogere . . . victosque domare**: see on l. 792.

1052. **suadereque**: see on *esseque*, l. 874. Successful efforts have recently been made, especially in America, to teach those who are both deaf and blind to talk.

1053. **quid sit opus facto**: *facto* depends on *opus*, which takes the ablative.

quid is an accusat. of reference. See note on l. 844. In Terence *Ad.* iii. 4. 65 'moneo quid facto opus sit'. Plaut. *Truc.* v. 10 'opus est cibum'.

1054. **amplius**, 'further, longer, too long,' so 'continually.'

1057. **vigeret**: subjunctive after **cui** = *quippe cui*, Duff.

1058. **pro vario sensu**, 'according to their different emotions,' pleasure, grief or fear, &c.; cf. l. 1061 and note on l. 1063.

1059. **mutae**: of inarticulate sounds, see note on l. 1088.

denique, 'actually.'

1061. **gliscunt**: literally 'swell,' i.e. their hearts swell with joy or passion (**dolor**, 'resentment'); cf. iv. 1069 'inque dies gliscit furor'.

1062. **quippe etenim**: so in l. 1169 a redundant expression = 'for.'

rebus apertis, 'from plain' or 'obvious facts.' So in iv. 467. 'nam nil aegrius est quam res secernere apertas ab dubiis'.

1063. Munro quotes Darwin: 'the dog since being domesticated has learnt to bark in at least four or five distinct tones.' Molossi (*canes* is often omitted) were a famous breed of large dogs celebrated throughout all Latin literature.

1064. **mollia ricta**, 'spongy open lips.'

ricta: an irregular plural from collateral form *rictum* as in vi. 1195. Observe the number of adjectives without connecting particles; asyndeton is very common in Lucretius; cf. ll. 948, 1096, 1436.

1065. **restricta**: bare or show their teeth, as in Quint. *Decl.* xii. 27 'restrictis labris'.

1066. **et cum**, 'than when . . .' so again in ll. 1067, 1071, 1077. After *alius*, *ac* or *atque* is more common than *et*; see note on l. 1260.

iam, 'outright.'

omnia: sc. *loca*.

1069. 'pretend to bite them gently with lightly closing jaws.' Munro seems to put it rather too strongly: 'a feint of swallowing them.' For **haustus** see note on l. 991. Munro quotes a passage, 'nec blandis mihi morsibus renides,' from an epigram on a pet dog, Myia, written perhaps in the first century A.D., and found at Agen à Auch in South France: apparently it is in imitation of Catull. iii.

1070. **alio pacto**=*alia ratione*; cf. l. 1281; it is common throughout Latin.

gannitu, 'yelping.'

adulant: rarer than *adulantur*, 'caress,' literally, 'fawn on.'

1071. **et cum**: as above, l. 1066.

baubantur, 'bay,' ἅπ. λεγ.

1072. **plorantes**, 'whining' or 'howling.'

summisso corpore, 'crouching,' with the tail between the legs.

1074. **iuvencus**: the adjective is rare in this use: the word is more common as a substantive or with *bos* understood. It is also used of young men and maidens.

1075. **pinnigeri**. Cf. l. 737 'Veneris praenuntius ante pennatus graditur'.

calcaribus amoris: so we have in Verg. *Georg.* iii. 209 'sed non ulla magis vires industria firmat quam Venerem et caeci stimulos avertere amoris, sive boum sive est cui gratior usus equorum'.

1076. 'he snorts out the alarm': **ad arma**, *aux armes*, this is the cry of the sentinel warning his comrades, here of the horse snorting to attract his mate.

1077. **sic alias**=at any chance time.

concussis artubus: his limbs pulsing and quivering with life.

1078. Notice the redundancy of expression.

1079. **ossifragae**, 'osprey,' which is itself derived from the Latin. Again the phraseology is tautological, *marinis fluctibus in salso victum vitamque*, as in l. 1105. *salsum* is here a noun. Duff compares *in tranquillo*, used as a substantive, l. 12.

1081. **iaciunt**=*mittere*, l. 1029. Duff's theory that some line, as 'et cum progeniem parvam nidosque revisunt', cf. Verg. *Georg.* i. 414 'iuvat progeniem parvam dulcesque revisere nidos,' has dropped out, is not only improbable owing to the double **et cum** in different senses so close together, but also absolutely unnecessary, for Lucretius says birds frequently utter cries quite distinct from those that they make when fighting over their prey: there is no need to add another point of difference.

1082. **praedaeque . . .**, 'struggle with their prey': if *praeda* is read, it is governed by *de*.

1083. **tempestatibus**, 'along with the changes of weather.' Take *una* with *cum*: for the inversion cf. l. 1228.

1084. **cornicum ut saecla vetusta**: crows, rooks, and ravens are said to be long-lived.

1085. This superstitition is mentioned in Verg. *Georg.* i. 388 'cornix plena pluviam vocat improba voce'. Notice the redundancy of expression in l. 1086.

1087. Cf. l. 1061.

muta: of inarticulate sounds, so in l. 1059.

1089. **tum**: emphatic.

aequum, 'natural,' right and fair by the rules of natural superiority.

1091. For this and the following lines which amplify Lucretius' former remarks about fire, cf. l. 953 and note.

ne forte requiras: final not imperative; cf. 'ne forte credas', l. 890.

1093. **primitus**: ante- and post-classical.

inde, 'and from it,' as in l. 1042.

1095. **fulgĕre**. Cf. vi. 165 in the same position in the line.

plaga 'the bolt of heaven has filled them with its glowing heat;' cf. l. 1220.

1096. **et tamen**, 'and apart from that,' as in l. 1177, i.e. the following reason is in itself a sufficiently strong argument. Notice the two unconnected participles in addition to an adjective; see note on l. 1064. Cf. with this passage i. 897–900 'fit . . . ut altis arboribus vicina cacumina summa terantur inter se, validis facere id cogentibus austris, donec flammai fulserunt flore coorto.'

1097. **aestuat**, 'sways about,' others translate, 'grows hot.' But cf. 'fretis aestuosis', Hor. *Od.* ii. 7. 16. *aestus* is used in the same sense of turmoil and violent motion, l. 1435 'belli magnos commovit aestus'.

1099. **flammai**: see on *aquai*, l. 946.

1100. **mutua**: adverbial neuter plural, as in iv. 301, for *mutuo*, which is impossible in hexameters.

1101. **utrumque**: subject to *potest*, 'either of these causes.'

1104. **verberibus**: a strong word of the heat caused by the striking of the sun's rays; cf. *plaga*, πληγή. In l. 484 we have 'radii solis cogebant terram verberibus crebris in artum.'

1105. **victum vitamque**. Cf. note on l. 1079. The poetry from ll. 1105–1240 includes some of the finest in this book.

1106. **rebu'**: ablative of exchange.

1108. The beginnings of a more united and elaborate civilization: see the quotation from Horace on l. 1028.

1109. Duff recalls the original meaning of *praesidium* (from *praesidere*, a place to rule in). It is, however, more in accordance with Lucretius' custom to redouble his synonyms for emphasis rather than to search for slight differences in meaning, which had practically vanished in his time.

1111. The personal qualities of men, from which owing to a strongly hereditary tendency an aristocracy was gradually evolved. Monarchy is the earliest form of government after the first combination of families: this is followed by a monarchy tempered by an aristocratic element. Later comes the time when power of wealth supersedes influence of rank and gradually a plutocracy or democracy becomes the final governing principle.

1112. **vigebant**, 'were held in high honour.'

1113. **res**, 'property,' 'wealth.' Lucretius deplores the power

of wealth as Ovid in *Met.* i. 140 'effodiuntur opes, irritamenta malorum: iamque nocens ferrum ferroque nocentius aurum prodierat', and as Horace in *Od.* iii. 3. 49 'aurum irrepertum et sic melius situm cum terra celat'. Cf. l. 1241 and following.

1115. Lambinus quotes Hor. *Sat.* ii. 3. 94 'omnis enim res, virtus, fama, decus, divina humanaque pulchris divitiis parent', and following.

sectam sequuntur, 'follow in the train of.' Catull. lxiii. 15 'Gallae sectam meam exsecutae, duce me, mihi comites'; Cic. *N. D.* ii. 22. 57 'omnis natura habet quasi viam quandam et sectam quam sequatur'.

1116. **creti**: see note on *concreta*, l. 798.

1117–35. It has been suggested that these lines on the evils of ambition were written with reference to incidents in Memmius' life.

1118. **vivere parce**: the subject to *sunt*; notice the verb is attracted into the plural by the plural predicate *divitiae*. Wakefield quotes Hes. *Op.* 40 *νήπιοι, οὐδὲ ἴσασιν ὅσῳ πλέον ἥμισυ παντός*, i. e. enough is as good as a feast.

1119. 'There is never lack of little.'

1120. **claros voluerunt se.** Munro quotes Plaut. *Trin.* iii. 2. 38 'cum te maxume clarum voles'.

1123. **succedere** depends on *certantes*. Gray's *Elegy* 'the paths of glory lead but to the grave'. We have 'in summum successit honorem', l. 1275.

1124. **iter viai**: so in ii. 626 'iter viarum'. For **viai** cf. l. 946.

1126. **invidia**: either the envy of unsuccessful rivals (*certantes*, l. 1124) or more probably, as Duff suggests, 'this *invidia* bears some resemblance to the Nemesis or envy of the gods in the old mythology, which Lucretius utterly discards'. In the same way in ll. 1136–40 Nemesis falls on kings, and in ll. 1231–2 on fleets. For the same reason, when a man was uncertain whether to marry a rich lady above him in rank or a poor one of his own position, Pittacus, the sage, advised him to choose the latter, telling him to watch children spinning their tops in the street and saying each to his own top *τὴν κατὰ σαυτὸν ἔλαυνε*, 'keep in your own line'. Cf. Arist. Clouds 25 *ἔλαυνε τὸν σαυτοῦ δρόμον.*

contemptim almost = *contemptos* predicative. Notice the *t* alliteration.

1127. **vaporant**: *vaporo* is found here only used intransitively in sense of 'burn', 'are blasted by the breath of envy.' Aeschylus gives a vivid description of Nemesis in *P. V.* 360 *ὃς* (*Ζεὺς*) *αὐτὸν ἐξέπληξε τῶν ὑψηγόρων κομπασμάτων. ἐφεψαλώθη κἀξεβροντήθη σθένος . . . κεραυνῷ Ζηνὸς ἠνθρακωμένος*, where the thunderbolt of Zeus fell on and blasted the boastful offender.

1128. **et quae . . .**, 'and all that is raised aloft above the level of other things.'

quae . . . cumque: in tmesis; see on l. 883.

aliis: ablative of comparison, probably neuter as *summa*.

1130. Vergil holds a different opinion in *Aen.* vi. 851 'tu regere imperio populos, Romane, memento'.

1131. **proinde**: dissyllabic as in l. 1041.

sine: addressing each reader individually.

sanguine sudent: see Lewis and Short, *sudo*, I. A. β; Luke xxii. 44; Hesiod, *Op.* 289 τῆς δ' ἀρετῆς ἱδρῶτα θεοὶ προπάροιθεν ἔθηκαν ἀθάνατοι· μακρὸς δὲ καὶ ὄρθιος οἶμος ἐς αὐτὴν καὶ τρηχύς. Duff quotes the French proverb 'suer sang et eau', to exert oneself excessively.

1133. Men are too ready to follow the majority and go with the stream of public opinion: also they do not trouble to think for themselves, and so the faculties gradually become weaker and more rudimentary from disuse. Duff adds Hor. *Ep.* i. 16. 19 'vereor ne cui de te plus quam tibi credas'.

1135. 'And this is no more good at the present time nor will it be in the future . . .'

1136. The Nemesis and *invidia* of l. 1126 fell on the kings of old times. Notice participle and adjective to *maiestas*.

1137. **soliorum**: an unusual plural attracted probably by the number of *sceptra*, which in the abstract sense is generally used in the plural; see on l. 1234.

1138. 'The glorious badge of the sovereign head,' i. e. the crown.

insigne is a substantive.

cruentum must be taken with **sub pedibus lugebat**.

1140. **conculcatur**. Cf. ll. 1234–5.

metutum: the only instance of the passive of *metuo*, with the exception of *metuendus*. Juvenal gives a lurid picture of the malevolence of the mob in *Sat.* x. 66 'Seianus ducitur unco spectandus: gaudent omnes. "quae labra, quis illi vultus erat. numquam amavi hunc hominem"'.

1141. **res**: either (1) 'things came at length into complete ruin and confusion', **ad summam faecem turbasque**, 'to the lees of the utmost disorder,' or (2) = *summa res*, 'the sovereign power passed into the hands of the lowest of the mob' where *ad summam faecem turbasque* means 'to the mere dregs of the people and to mob-rule.'

redibat is probably emphatic, returned, went back to the disorder of the earliest times previous to the government of kings.

1142. **summatum**, ἅπ. λεγ. = *summum imperium*. Cf. *auxiliatum*, l. 1040.

1143. From **partim** we get the subject to *docuere*, as in l. 1310. Compare the development of the power of the plebs in the early history of Rome.

1144. **constituere** is of course the perfect.

1145. **defessum**: common with infinitive in Plautus, as *lassus* with the same construction in Propertius.

1149. **aequis**: emphatic, legal t. t. 'equity,' or case-law, where the circumstances of the case are taken into consideration.

1150. **pertaesum**: more common with the genitive than with the infinitive.

1151. **inde**: from the punishment that is now meted out to those avengers who take the law into their own hands.

1152. i.e. all who commit violence and wrong are likely to find their evil deeds recoil on their own heads.

1153. Wakefield quotes Hes. *Op.* 265 οἳ αὐτῷ κακὰ τεύχει ἀνὴρ ἄλλῳ κακὰ τεύχων, ἡ δὲ κακὴ βουλὴ τῷ βουλεύσαντι κακίστη, i.e. they fall into pits that they have dug for others: they are hoist with their own petard.

1156. This is not an inconsistency in Lucretius, who held the view that the gods entirely disregarded the affairs of mortals: he means that if a man does believe, whether rightly or wrongly, in the existence of the gods he ought to act on his belief and dread divine retribution on his misdeeds.

1157. Cf. Psalms xiv. 1 and liii. 1, 'The fool hath said in his heart, There is no God.' 'But,' says Bacon, 'he does not believe it'; he says it merely to encourage himself.

clam: an adverb instead of an adjective, which would be more usual with *fore*. Munro: 'he cannot but feel a misgiving that his secret (id) can be kept for ever'. So also in Cic. *de Fin.* i. 16. 50 'quamvis occulte fecerit, numquam tamen id confidet fore semper occultum'.

1158. **se**: to be taken with **protraxe** = *protraxisse*, 'have given themselves away.'

protraxe in medium: as in l. 1454 'protrahit in medium'. Compare iv. 1011–14, where Lucretius says that men during their sleep and in their dreams carry out their most deeply cherished wishes and plans.

1161. **numina pervulgarit**, 'spread abroad the worship of . . .' Lucretius will now set forth the beginnings of religion.

1163. **sollemnia**, 'recurring at stated intervals.' Notice *sācra* followed by *sācra*; cf. l. 839 'interūtrasque nec ūtrum ūtrimque': so in iv. 1222 'quae pātribus pātres'; iv. 1259 'līquidis et līquida': so Homer has Ἄρες Ἄρες.

1164. This sentence is an adjectival clause.

rebu', 'occasions.'

1166. **suscitat** = *aedificat*, 'raises,' i.e. makes men raise.

1167. **celebrare**, 'to throng them': so i. 4 'terras concelebras'.

1168. **non ita difficilest**: exactly the English idiom, 'it is not so hard': on this line depends the construction of the indirect questions, ll. 1161–3.

1169. **quippe etenim**: see note on l. 1062.

1170. Waking visions or trances, ὕπαρ, opposed to l. 1171, dreams in sleep, ὄναρ. Duff remarks that in ll. 148–9, 'tenvis enim natura deum longeque remota sensibus ab nostris animi vix mente videtur,' Lucretius seems to be inconsistent. But Lucretius means that so fine is the nature of the matter of which the gods are composed that the senses of man (sight, hearing) are quite unable to perceive it, and only the mind, i.e. that part of man which is composed of the finest atoms, is able to receive any impression of it.

1171. **mirando auctu**: ablative of quality.

et magis, 'and still more.'

1172. **tribuebant**, 'attributed'; cf. *tribuit*, l. 1195: so *tradere*, l. 1187, *dabant*, l. 1175, and *relinquunt*, l. 1239.

1174. **pro**, 'to match.'

1176. **suppeditabatur**, 'was brought up before them,' 'rose up before their eyes.'

manebat, 'appeared unchanged'; cf. l. 830 'manet sui similis res'. Therefore men imagined that these divinities were immutable and immortal.

1177. **et tamen**: see note on l. 1096; with **omnino**, 'and yet without all this.' With **auctos** understand *deos*.

1178. **temere**, 'lightly' or 'easily'.

convinci. Munro says Lucretius often uses *vinco* for *convinco*: to this use of *convinci* for *vinci* there is no parallel case. Duff quotes Shakespeare, *Macbeth*, i. 7. 64, 'his two chamberlains Will I with wine and wassail so convince,' i.e. overcome.

1179. **fortunis**: they believed that the happiness of the gods far exceeded their own.

1180. **vexaret**: subjunctive, as expressing their thought, not necessarily the true reason, a semi-sneer on the part of Lucretius at the credulity of these god-worshippers.

1182. **inde**: i.e. 'ab operibus suis'.

1183. **caeli rationes**, 'the system of the heavens,' i.e. the series or cycle of natural phenomena, e.g. *tempora*, 'the seasons,' the waning and waxing of the moon, &c.

1185. Compare Vergil's line that refers to Lucretius, *Georg.* ii. 490 'felix qui potuit rerum cognoscere causas'.

1186. 'And so they considered it to be their last resource to attribute everything to the gods and to make everything subject to their will.'

perfugium, a complementary accusative to tradere et facere, infinitives to be treated as nouns.

1188. **templa**: here used in the older sense of 'realms' or 'quarters of the sky', as it is in ll. 1205, 1436, and in i. 1014 'caeli lucida templa'. Epicurus maintained that the gods lived not in the sky but in the spaces between the worlds, *μετακόσμια*.

1189. **sol**: a reading suggested for MS. *nox* which occurs again in the next line.

1190. The substantives in this line and the next are subjects to *volvi videtur*. Notice the repetition of *luna*.

signa severa, 'the still, cold stars,' 'the austere stars': l. 1210 'candida sidera'.

1191. **faces**, 'meteors': ii. 206 'nocturnasque faces'. Vergil describes them well in *Georg.* i. 367 '(videbis) flammarum longos a tergo albescere tractus'. Notice the repetition **flammaeque volantes**, 'fiery comets.'

1192. A remarkable case of asyndeton; cf. ll. 1372, 1448–9.

1193. Notice the force given by the *m* alliteration as the culmination of the catalogue of phenomena, 'the terrors of the threatening thunderbolt'; cf. l. 1221.

1194. **genus**: probably the exclamatory accusative. Duff compares ii. 14 'o miseras hominum mentes!'

1195. **tribuit**: as in l. 1172.

iras: men in their folly assigned human passions to the gods, though, as Munro says, '"neque tangitur irā" was an essential of the divine nature according to Epicurus and Lucretius'. So Verg. *Aen.* i. 11 'tantaene animis caelestibus irae?'

1198. **pietas**, 'no act of piety is it to be often seen.'

velatum: the Romans prayed *velato capite*, the Greeks *aperto capite*.

1199. **vertier**: see note on l. 934. Munro: 'the suppliant approached in such a way as to have the statue of the god on his right and then after praying wheeled to the right so as to front it, and then prostrated himself: *προσκυνεῖν περιφερομένους*.'

ad lapidem: either (1) contemptuously on the part of Lucretius, 'a mere stone,' 'the work of men's hands,' or possibly a diorite or meteoric stone, or (2) one of the busts of Janus or perhaps one of the *termini* (boundary stones) which were held sacred by the Romans.

1200. Notice the strong *p* alliteration.

pandere palmas: i.e. with the palms uppermost as in Verg. *Aen.* iv. 205 'multa Iovem manibus supplex orasse supinis', and in Aesch. *P. V.* 1005 *λιπαρεῖν ὑπτιάσμασιν χερῶν*.

1202. **votis nectere vota**: either (1) to reel off one prayer after another as a selfish man might do, making no end to his wishes as in Pers. *Sat.* v. 53 'nec voto vivitur uno', or (2) as the rows of votive tablets which were hung up on the walls of the temples in return for blessings already vouchsafed and setting forth petitions still to be granted, *votivae tabulae*.

1203. **sed mage**, 'but rather,' an apocop. form of *magis*, being originally *magi*, then *magi*, finally changing to *mage* as *pote* of *potis* in iii. 1079. An untroubled conscience is the possession of the really good man.

1205. **templa**: as in ll. 1188, 1436.

fixum: for the fixity of the sky we may compare l. 511 'ex utraque polum parti premere aera nobis dicendum est extraque tenere et claudere utrimque', and for its revolution i. 2 'caeli subter labentia signa', and Ov. *Met.* ii. 204 'altoque sub aethere fixis incursant stellis'; the two ideas should be combined, i.e. the revolution of the sky on a fixed axis.

1206. Notice this impersonal construction with a genitive probably on the analogy of the genitive after verbs such as *reminiscor*: this construction is common in Cicero, see Lewis and Short, *mens*, II. B. The more usual construction is the personal subject.

1207. **oppressa**: to be taken with *pectora*.

1208. **expergefactum caput erigere**: i.e. 'se expergefacere et consurgere atque intrare pectora nostra'.

1209. **nobis**: ethic dative, 'we may find to our cost'; cf. l. 805.

immensa: in its primary sense, 'boundless.' This is one of the lines which seem to shadow certain misgivings in the mind of Lucretius about the power of the gods; cf. ll. 1156–7.

1211. 'Inability to solve the riddle of the universe distracts man's mind.'

dubiam is predicative.

1213. **finis**: feminine, as in l. 826.

quoad: monosyllabic as in ll. 1033, 1433=*quatenus*.

1214. **laborem**, 'the strain of restless motion,' pulling now in one direction, now in another; cf. l. 1272 'durum sufferre laborem'.

1215. **donata**: to be taken with *moenia*. Munro: 'or gifted by the grace of the gods with an everlasting existence they may glide on through a never-ending tract of time and defy the strong powers of immeasurable ages'; a fine translation of a fine piece of poetry. l. 1216 recurs in i. 1004, l. 1217 in l. 379 of this book.

1219. **animus contrahitur**: we find a similar expression in Cic. *Lael.* xiii. 48 'ut et bonis amici quasi diffundantur (expand) et incommodis contrahantur'. For **correpunt membra** cf. l. 1223 'corripiunt membra'.

1220. **plaga**: see note on l. 1095. For **murmura** cf. l. 1193 'murmura magna minarum'.

1223. **corripiunt** governs **membra**; in l. 1219 *membra* is subject to *correpunt*.

1224. **nequid ob admissum**: for *ne ob quid admissum*.

1225. **poenarum solvendi**: either (1) a combination of (*a*) gerund, *poenas solvendi*, (*b*) gerundive, *poenarum solvendarum*, the object being to avoid harsh and cumbrous terminations (see Roby, *Lat. Gram.* Pt. ii. p. lxviii), or better (2) *poenarum* depends on *solvendi*, which is to be taken as a substantive, both being objective genitives, 'the time of the paying of the penalty.'

adultum: Lachmann's suggestion for *adauctum*; cf. l. 800.

1227. **induperatorem**: see on l. 876.

cum . . . pariter=*una cum*; for the inversion of the usual order see note, l. 1083.

1229. **divum pacem**, 'the grace and favour of heaven,' in this case manifested by *ventorum paces*, 'a lull in the storm.' Notice **adit**=*implorare*. Munro quotes the same use of *adire* in Apul. *Met.* vi. 3 'adire cuiuscumque dei veniam'.

animas=*auras* as in vi. 693 'ne dubites quin haec animai turbida sit vis', and in Hor. *Od.* iv. 12. 2 'impellunt animae lintea Thraciae.'

1231. **saepe**, 'in many an instance'=*ut saepe fit*.

1232. **nilo . . . minus**: for *nihilominus*.

ad vada leti=*ad letalia vada*.

1233. **vis abdita**: the secret power and inscrutable working of nature.

1234. **obterit**: so *proculcare* next line and *conculcatur*, l. 1140.

fascis saevasque securis: the phrase is repeated in iii. 996 'petere a populo fascis saevasque securis'. In l. 1137 the insignia of the highest offices ('sceptra superba et praeclarum insigne') are used for the power they confer, 'greatness.'

ludibrio: predicative dative; cf. *vitio vertere*, l. 1357.

1236. **vacillat**: as the result of an earthquake; so in vi. 575 'vacillant omnia tecta'.

1237. **dubiaeque minantur**, 'threaten to fall.' Duff compares Sen. *N. D.* vi. 1. 2 'oppidi pars ruit dubieque stant etiam quae relicta sint'.

1239. **relinquunt**=*tribuebant*, l. 1172, 'assign.'

1240. **in rebus**: i. e. in things on earth.

quae is consecutive.

1241. **quod superest**=τοιαῦτα μὲν δὴ ταῦτα, so much for that, 'to continue'; it marks a transition. Cf. note on l. 1113.

1242. **argenti pondus, plumbi potestas.** Lucretius is very fond of periphrasis, and instead of naming the material or substance alone he prefers to add to it its especial properties or qualities; cf. l. 1286 'ferri vis aerisque', l. 1281 'ferri natura'.

potestas, 'the potentiality' or 'useful qualities'.

1245. **bellum silvestre**: the mode of warfare natural to savage tribes and primitive man.

1246. **formidinis ergo**: 'to inspire terror': **ergo**, 'for the sake of,' is found in Cato, Livy, Cicero, and Vergil, yet it was held by those who used it to be an archaic preposition.

1248. **pandere**, 'to clear' or 'open up' = ψιλοῦν. Duff also compares ψιλὴ γῆ, 'arable land.'

pascua: adjective and predicative, 'fit for pasture.'

1250. **fovea**, 'pitfall'; so in Hor. *Ep.* i. 16. 50 'cautus enim metuit foveam lupus'.

igni: ablative, as in l. 1254; see l. 930.

venarier: a substantival infinitive; for the form see note on l. 934.

1252. **quidquid id est**, 'whatever the cause may be.'

1254. **percoxerat**: the heat penetrated into the very vitals of the earth.

igni: as in l. 1250.

1255. See note on l. 911. **venis ferventibus**, 'from the glowing veins.'

1257. **concreta**: i. e. cooled and moulded into lumps; cf. l. 798.

videbant=the optative of indefinite frequency, a Graecism frequently imitated by Livy.

1259. **lēvi**, 'smooth and polished.'

1260. 'Moulded into shapes similar to the outlines of the cavities in which each lump lay.'

simili atque: see note on l. 1066.

1262. **penetrabat eos**, 'it gradually occurred to them': the word implies that it took some time for the idea to penetrate. Wakefield quotes Tac. *Ann.* iii. 4 'nihil tamen Tiberium magis penetravit quam studia hominum accensa in Agrippinam', but this is not parallel use, for here *penetravit*=*vexavit*. For the use of the impersonal verb see the note on l. 795.

1264. Munro: 'and could by hammering out be brought to tapering points of any degree of sharpness and fineness'.

prorsum, 'absolutely,' 'perfectly,' is less commonly used than the form *prorsus*.

quamvis, 'as far as one could wish.'

1266. **tela**=ὅπλα, 'instruments' or 'tools' for agriculture, &c.: the use of metals for weapons was a later development; cf. the next paragraph. The subject to **parent** is *haec metalla* understood, to **possent**, *ipsi* understood.

1267. **materiemque dolare**, 'hew timber and plane smooth the planks.'

lēvia: predicatively. For the form **materiem** see note on l. 1019.

1268. **perque forare**: tmesis; see note on l. 883: *terebrare*, to bore a hole with a gimlet; *perforare*, to pierce with a bradawl; *pertundere*, to punch a hole.

1270. **violentis viribus**, 'with masterful might.'

1272. **laborem**, 'strain,' as in l. 1214.

pariter: i. e. *cum aere*. In l. 1359 we have again 'pariter durum sufferre laborem'.

1273. **iacebat**, 'lay neglected.'

1274. **hebeti mucrone**: oxymoron, ablative of description.

1275. Cf. l. 1123 'ad summum succedere honorem'.

1276. **volvenda aetas**, 'time as it rolls on'; so in l. 931 'volventia lustra'. In Lucretius the gerundive is the equivalent of the present participle in meaning; so too we find in Verg. *Aen.* ix. 7 'volvenda dies'=*dies se volvens*.

1277. **nullo honore**: ablative of description. For the sentiment of ll. 1276–8 cf. ll. 831–3. l. 1278 is practically a repetition of l. 833.

1279. **appetitur**, 'is coveted.'

laudibus: ablative of attendant circumstances. For **in dies** cf. ll. 1307, 1370 of daily increase, opposite to *quotidie* which implies no increase.

1281. **quo pacto** = *quomodo*; cf. l. 1070.

ferri natura: a periphrasis for *ferrum*; cf. l. 1286 'ferri vis aerisque', and the note on l. 1242.

1283. Horace gives a similar description in *Sat.* i. 3. 101 'unguibus et pugnis, dein fustibus, atque ita porro pugnabant armis quae post fabricaverat usus'.

1285. **cognita**: neuter plural agreeing with feminine and masculine subjects which are impersonal.

1286. **ferri vis**: see note on l. 1242.

1288. **quo**: Duff= ὅσῳ, 'because'; often used when the sentence contains a comparative.

facilis, 'ductible,' 'easy to work.'

natura is nominative.

1289. **tractabant**, 'till': so in *Col.* ii. 4. 5 'lutosum agrum tractari'. Hesiod describes the tools of primitive agriculture *Op.* 151 χαλκῷ δ' εἰργάζοντο· μέλας δ' οὐκ ἔσκε σίδηρος.

aereque: see note on *esseque*, l. 874. For **belli fluctus** cf. l. 1435 'belli aestus'.

1290. **serebant**: surely from *serere*, 'to sow'; cf. Lucan, who uses the same metaphor in viii. 352 'vulnera nostra in Scythicos spargis populos'. Munro suggests that it possibly comes from *serere*, 'to plait.'

1291. **ollis**: archaic form of *illis*, so in l. 1390, not uncommon in Vergil. The construction is *dativus commodi*.

1292. **inerma**: a rare form, found in Cic. *Fam.* xi. 12. 1 'cum paucis inermis' and also in Sallust. Lucretius has also ii. 845 *sterila* for *sterilia*, i. 340 '*sublima* for *sublimia*, ii. 1122 *hilaro* for *hilari*.

1294. **species**, 'the very appearance of a copper sickle,' or possibly only a Lucretian periphrasis for *falx*. Duff renders it, though not so forcibly, 'the fashion.' In Vergil the sickle becomes the sword, *Georg.* i. 508 'et curvae rigidum falces conflantur in ensem'. For **versaque in opprobrium**, v. l. *obscenum*, 'fell into disgrace,' cf. l. 1357 'vitio vertere'.

1295. This line amplifies l. 1286.

1296. **exaequata**: as the Romans found the iron sword of their legionaries gave them a great advantage over the copper sword of the German tribes, which bent at every blow. But when all men used iron swords then the fights were contested on equal terms.

creperi, 'wavering'; originally dusky, obscure, hence uncertain=*ancipitis Martis*.

1297. **prius est**, 'it is an earlier custom; cf. *ante fuit*, l. 1380.

conscendere is a substantive and is subject to *est*.

1298. **moderarier**: for the form see note on l. 934. Here *moderarier* governs the accusative, in l. 1312 it takes the dative.

dextraque vigere, 'to show prowess with the right hand,' while the left holds the bridle.

1300. We have the same construction in this line as in l. 1297.

1301. **falciferos**: Livy uses the word *falcatus*. The Britons, Gauls, and Germans employed these scythe-wheeled chariots.

1302. **boves lucas**: so called because the Romans first saw elephants in Lucania in the army of King Pyrrhus, as the story is told in Plin. *N. H.* viii. 6. 16.

turrito: so in Sil. Ital. iv. 601 'vis elephantorum turrito concita dorso'; cf. the quotation from Livy on l. 1315.

1303. **anguimanus**: as in ii. 537 'anguimanus elephantos'; Ov. *Met.* i. 184 'anguipedum.'

1305. **alid**: for *aliud*, as in ll. 257, 1456.

1306. **quod** is final relative.

1307. **in dies**: see note on l. 1279.

augmen: a favourite word with Lucretius, in other writers it is rare.

1308. **in moenere belli**, 'in the service of war.' Hannibal used oxen with another object, when he fastened lighted faggots on their horns to mislead the Romans.

1310. **partim**=*nonnulli*; see the note on l. 1143 for the construction.

1311. No distinction between **doctoribus** and **magistris** is intended.

1312. **qui** is final relative.

moderarier: with dative, contrast l. 1298. For the form see note on l. 934.

1314. **turbabant**: the subject is *leones* understood from l. 1310.

1315. These were not the manes and crests of the wild beasts, but were artificial and were intended partly to protect the head but chiefly to inspire terror, as in Liv. xxxvii. 40. 4 'ingentes ipsi (elephanti) erant: addebant speciem frontalia et cristae et tergo impositae turres'. In Vergil we have the natural crest of the lion mentioned, *Aen.* xii. 6 'tum demum movet arma leo, gaudetque comantes excutiens cervice toros'.

1316. **fremitu**: sc. *leonum*.

1318. **irritata**: transference of epithet which properly belongs to *leae*.

leae is poetical for *leaenae*.

1319. **adversum . . .**, 'would strike in the face these who met them.' **adversum** is an adverb and is to be taken with **venientibus**, which is dative of the possessor. Duff compares 'on lui trancha la tête'.

1320. **nec opinantis**: accusative agreeing with the unexpressed object of *deripiebant*, 'would tear down.'

1321. **deplexae**, ἅπ. λεγ. from *deplector*, 'twining round them.'

dabant in terram, 'dragged them to the ground'; Liv. xxxi. 37. 9 'rex, ruente saucio equo, praeceps ad terram datus'.

adfixae = *inhaerentes*, 'fastening on them.'

1324. **hauribant**: for the form see note on *scibat*, l. 934, for the meaning see on *haustus*, l. 991. Livy uses the same expression in a similar context vii. 10. 10 'uno alteroque ictu ventrem atque inguina hausit'.

subter: an adverb, as in l. 1364, and compare *infra*, l. 1371, and *circum*, ll. 972, 1378, 1437.

1325. **terram ruebant**, 'scored' or 'ploughed up the earth', as in vi. 726 'cum mare permotum ventis ruit intus harenam'. There is a similar idea in Verg. *Ecl.* iii. 86 'pascite taurum, iam cornu petat et pedibus qui spargat harenam'.

fronte: i. e. *cornu*.

1327. This line is followed in the MSS. by a verse **in se fracta suo tinguentes sanguine tela**, which is probably spurious, and was written as a gloss to explain the word **infracta** as equivalent to *in se fracta*, 'broken off short in their bodies,' for there is also a rare word *infractus*, 'unbroken.'

1329. **dabant ruinas**, 'wrought ruin'; l. 1340 'fera facta dedere'.

1330. **transversa**, 'by shying' or 'swerving to the side would try to avoid'.

exibant, with the accusative, is not uncommon in the sense of avoiding; so in Verg. *Aen.* v. 438 'corpore tela modo atque oculis vigilantibus exit', and in xi. 750 'vim viribus exit'.

adactūs, 'the thrusts' or 'gashes', a common meaning of *adigo*, though **adactus** is ἅπ. λεγ.

1331. **iumenta**: tame animals, 'equi mulique atque asini.' We have a similar description of rearing in Verg. *Aen.* x. 892 'tollit se arrectum quadrupes et calcibus auras verberat'.

1332. **ab nervis succisa**, 'hamstrung,' used of men or horses. **ab nervis**=*a parte nervorum*.

1333. **concidere . . .**: Verg. *Aen.* v. 447 'ipse gravis graviterque ad terram pondere vasto concidit', of the crashing fall of the mighty boxer Entellus.

1334. **ante**: adverbial, to be taken with **putabant**. For the assonance of **domi domitos** cf. the quotation from Vergil on l. 1333. In l. 392 we have 'certamine . . . cernere certant', ii. 539 'penitus penetrari', iii. 753 'fera saecla ferarum'.

1336. Notice the emphatic asyndeton as in ll. 1192, 1372, 1448–9.

1337. **reducere**: scanned as *redducere*; cf. *relligio* and *relliquiae* for the sake of metre.

1339. **male mactae**. Munro takes *mactae* as a past participle of an obsolete *macĕre*; cf. *permacēre*. Ennius has 'permaceat paries'; cf. *macellum*. Others hold it to be a syncopated form of *mactatus* from *macto*. Duff distinguishes it clearly from the participle of the obsolete *magĕre*, found in the phrase 'macte virtute', well done.

1340. **fera facta**: the object of **dedere**; cf. l. 1329.

1341–6. MSS. have six lines which Munro considers spurious. Duff says 'they are clearly a collection of tags from other parts of the poem, interpolated by some ignorant copyist'. Others retain the first three lines and reject the three following.

si⟨c⟩ fuit ut facerent: sed vix adducor ut, ante
quam commune malum fieret foedumque, futurum
non quierint animo praesentire atque videre.
et magis id possis factum contendere in omni
in variis mundis varia ratione creatis (as in l. 528)
quam certo atque uno terrarum quolibet orbi.

The general meaning is 'such was their conduct: yet I can scarcely believe that they would not be able to foresee and forecast the probable disaster even before it actually happened. And one would find it easier to imagine it happening under general circumstances anywhere in the universe rather than in any particular world,' the idea being that if a phenomenon is uncommon somewhere it must be common somewhere else in order to preserve the equilibrium (*ἰσονομία*).

1347. **voluerunt**: the subject is the whole of l. 1349.

1348. **ipsique perire**, 'though they themselves should perish': they did not wish to die. Duff quotes Thuc. iii. 40 *οἱ μὴ ξὺν προφάσει τινὰ κακῶς ποιοῦντες ἐπεξέρχονται καὶ διόλλυνται*, i. e. attack their foes at the cost of their own lives.

1350. **nexilis**: i.e. of skins tied together, and still earlier of plaited reeds or long leaves.

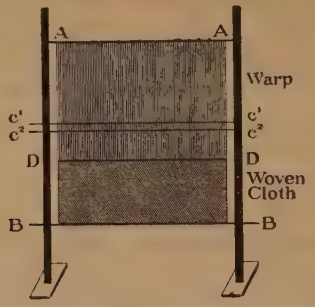
1351. **tela**, 'the web,' the threads of which were fastened vertically to the yarnbeam (*scapi*) below and above to the *iugum* and separated alternately by the heddles (*insilia*), of which there were two, so as to leave a diamond-shaped space through which the shuttles (*radii*) passed horizontally: the spindles (*fusi*) held the thread. See cut on p. 60.

lēvia, 'polished.'

1352. **gigni**, 'be made.'

1353. **insilia**, *ἅπ. λεγ.*

sonantes: the yarnbeams resounded as they swung between the uprights.



A A the *iugum* to which the vertical threads (the warp) were made fast; *B B* the *scapus* or yarnbeam on which the cloth is built; *D D* the line where the warp meets the cloth already woven; $c^1c^2c^2c^2$ are the *insilia* which pass through the vertical threads alternately and so form a diamond-shaped passage through which the shuttle and weft travel horizontally.

1354. In Egypt in Herodotus' time men did the weaving, while the women did business and traded, Herod. ii. 35 *αἱ μὲν γυναῖκες ἀγοράζουσι καὶ καπηλεύουσι, οἱ δὲ ἄνδρες κατ' οἴκους ἐόντες ὑφαίνουσι.*

1357. **vitio vertere.** Cf. l. 1294 'versa in opprobrium'.

vitio: predicative dative; cf. l. 1235.

1359. **pariter**: i.e. *cum agricolis.* Cf. l. 1272 'pariter durum sufferre laborem'.

1361. **specimen**, 'model'; so in l. 186 'si non ipsa dedit specimen natura creandi'.

insitionis, 'grafting.'

rerum depends on *creatrix.*

1363. **arboribus**: ablative of place whence.

caducae=*cadentes.*

bacae: especially olives and arbute-berries.

1364. **tempestiva**, 'in due season.'

examina, 'swarms' or 'patches of young shoots'.

pullorum, or *pullulus*, rare in this sense for *surculus.*

subter: adverb; see note on l. 1324.

1365. **unde**: either (1) 'and stimulated by this success'; or (2)= *a natura discentes*, 'imitating nature again,' when for instance they noticed mistletoe grafting itself on apple-trees.

libitumst, 'they conceived the wish to.'

1366. Cf. l. 935.

defodere=*inserere.*

1367. **aliam atque aliam**, 'another and yet another tillage of the plot so dear to them.'

agelli: an affectionate diminutive.

1368. **mansuescere**: here transitive governing *fructus.* They

saw that careful working of the soil improved the fruits by gradually removing the roughness natural to them in their wild condition. **terram** is an alteration for *terrā*.

1370. **in dies**: see note on l. 1279.

succedere, 'retreat higher up the hillside.'

1371. **infra**: an adverb; see note on *subter*, l. 1324.

1372. Notice the asyndeton and cf. ll. 1192, 1336, 1448–9.

lacus, 'water tanks', or perhaps 'dew ponds'.

rivos, 'irrigation channels.'

laeta, 'luxuriant,' as in l. 921.

1374. 'And to admit a grey-green ribbon of olive-trees to run between and mark the plots, spreading over . . .'

caerula: the stock epithet of olives, referring to the leaves of the trees. The Greeks use epithets of the same signification, Pind. *Ol.* iii. 23 γλανκόχροα κόσμον ἐλαίας: Soph. *O. C.* 701 γλανκᾶς φύλλον ἐλαίας.

inter . . . currere: tmesis; cf. note on l. 883.

plăga: a band or zone.

1377. **quae**: governed by *ornant*.

intersita: with fruit-trees planted between.

pomis: of different kinds of trees, apples, pears, cherries, figs, grapes, berries, nuts, &c.

1378. **arbustis**, 'plantations.' Munro: 'Lucretius uses *arbusta* continually for *arbores*, never *arbustis* for *arboribus* which suits his verse: *arbustis* therefore has here its usual meaning.'

circum: adverb; see note on *subter*, l. 1324.

1379. **imitarier**: see note on *molirier*, l. 934. It is subject to *fuit*.

1380. **ante fuit**, 'it was the custom to . . .'; cf. note on l. 1297.

1381. **concelebrare**, 'to frequent,' as in i. 4 'terras concelebras', so 'to practise frequently', here 'to sing.'

1382. **zephyri** depends on **sibila**, 'the whistling' (=ψιθύρισμα), an irregular plural found in poets, *sibili* occurring in Cicero; cf. *ioci*, *ioca*, and others.

cava calamorum. Cf. l. 772 'caerula mundi'; Verg. *Aen.* v. 180 'summa scopuli'.

1383. **cicutas**: properly hemlock stalks, used for pipes also in Verg. *Ecl.* ii. 36 'est mihi disparibus septem compacta cicutis fistula'.

agrestis: accusative masculine.

1385. **pulsata**: of the fingers pressing on the flute holes.

1386. **repertas**, 'which greet us,' agreeing with *querelas*.

1387. **otia dia**, 'abodes of unearthly calm,' preternatural stillness.

dius has two meanings, 'bright,' divine.' Two lines follow here which are identical with ll. 1454–5 and have been wrongly inserted.

1390. **ollis**: see note on l. 1291.

1391. **cum satiate cibi**=*iam satiatis cibo*. Munro quotes the line so frequent in Homer: ἐπεὶ πόσιος καὶ ἐδητύος ἐξ ἔρον ἔντο.

tum=*post epulas*.

cordi. Roby, *Lat. Gram.* Pt. ii. xl, predicative dative. Duff takes it as a locative 'at heart'.

1392–6. These lines resemble very closely ii. 29-33.

cum tamen inter se prostrati in gramine molli
propter aquae rivum sub ramis arboris altae
non magnis opibus iucunde corpora curant,
praesertim cum tempestas arridet et anni
tempora conspergunt viridantis floribus herbas.

1394. **iucunde habebant**=*iucundi reficiebant* or *curabant* as in l. 939.

1395. **tempestas**, 'weather.'

tempora, 'seasons.'

1398. **consuerant**: contracted for *consueverant*.

1399. **plexis coronis floribus**, 'with wreaths plaited with flowers.' Cf. Catull. lxiv. 284 'hos (flores) plexos tulit ille corollis'.

lascivia, 'pure lightness of heart.' In this sense *monebat* would usually be followed by *ut* with subj.

1401. **extra numerum**, 'out of step and time.' In l. 1409 we have 'numerum servare'.

1402. **duriter et duro**: cf. l. 950 'umida saxa, umida saxa', and note; Verg. *Aen.* v. 447 'ipse gravis graviterque concidit'.

1404. **vigebant**, 'were in high honour.'

1405. **hinc**: *a musa agresti*.

solacia somni, 'a consolation for want of sleep;' so in Aesch. *Ag.* 17 *ὕπνου ἀντίμολπον ἄκος*.

1406. **ducere, flectere, percurrere**: infinitives used as substantives.

1407. **percurrere lābro**. Cf. iv. 588 'unco saepe lăbro calamos percurrit hiantis'.

1408. **unde haec accepta**, 'these traditions received from them,' i. e. from the countrymen above.

vigiles: either (1) sentinels in camp, or (2) the fire brigade in Rome, of which there is a vivid account in Petron. 78 and Juv. *Sat.* xiv. 305–6.

1409. **numerum servare**, 'to keep the proper time'; cf. l. 1401. Munro reads *recens* for MS. reading *genus*.

hilo: *hilum* is the primitive form of *nihilum*. We find in Festus 'hilum putant esse quod grano fabae adhaeret, ex quo nihil et nihilum'. Ablative of difference as *multo* in l. 1445.

1411. **silvestre**, 'rough,' 'uncouth.'

1412. **praesto**: pleonastic with *adest*; but cf. l. 604 'est etiam quoque', l. 1169 'quippe etenim'.

pollere, 'to be best.'

1414. There are three ways of taking this line: (1) as Wakefield 'illaque melior res posterior reperta perdit sensus'; (2) 'posteriorque res melior perdit illa reperta et immutat sensus'; (3) as Munro 'posteriorque res melior reperta perdit illa (i. e. priora)', 'as a rule the later discovery of something better spoils the taste for former things.' The last way seems to be the clearest and best.

1415. **sensus ad . . .**, 'our feelings towards all that is old-fashioned.'

1416. **glandis**: objective genitive after *odium*. Cf. Numbers xxi. 5 'our soul loatheth this light bread.'

illa=*priora*.

1417. **strata**: with **herbis**. Cf. ll. 971–2.

aucta, 'heaped up.'

1418. Cf. ll. 954, 1011, of the times when such clothing was still unknown and when it was invented.

pellis: the genitive depends on **vestis**.

1419. **quam reor**, 'though I can well imagine that clothing of skins in the early days of its discovery provoked such envy . . .'

1420. **letum**: accusat. after *obiret*: **insidiis**, ablative of manner.

qui gessit, sc. *pellem ferinam*.

1421. **et tamen**, 'and yet after all.'

sanguine: with *disperiisse*, 'was spoiled.'

convertere, intransitive; see note on l. 831.

1425. **quo**, 'and in this matter.'

resedit: from *resideo*.

1426. Cf. ll. 953–7.

1427. **carere**: substantival infinitive, subject to *laedit*.

1428. **auro signisque apta**: (1) hendiadys, 'decked with figures embroidered in gold;' (2) 'decked with gold spangles and embroidered figures.' For the hendiadys cf. Verg. *Aen.* xi. 72 'geminas vestes auroque ostroque rigentes'. *Aen.* i. 648 'pallam signis auroque rigentem'. So too in English, Byron's *Sennacherib*, 'his cohorts were gleaming with purple and gold.'

1429. **dum**, 'if only.'

plebeia: sc. *vestis*.

sit: sc. *nobis*.

For the sentiment cf. Hor. *Sat.* i. 3. 13 'sit mihi . . . toga quae defendere frigus quamvis crassa queat'.

1430. **incassum frustraque**. Cf. 1002 'temere incassum frustra'.

1432. **quae finis**: see note on l. 826: (1) 'object'; (2) 'limit.'

1433. **quoad**: monosyllabic; cf. note on l. 1033; 'up to what point genuine pleasure continues to increase'.

1434. **id**: i. e. this misconception of pleasure has launched the vessel of man's life into a sea of trouble.

in altum: there is a similar metaphor in Aesch. *P. V.* 746 *δυσχείμερόν γε πέλαγος ἀτηρᾶς δύης*, and again in 563 *χειμαζόμενον*, 'with troubles tempest-tost.' So in Shakespeare 'a sea of troubles'.

1435. Cf. l. 1289 'belli miscebant fluctus'.

1436. **vigiles**: to be taken with **sol et luna**.

magnum versatile: for the asyndeton see note on l. 1064.

templum: as in l. 1188, where see note; 'the vault' or 'space of heaven'. So also in ll. 1204–5.

1437. **circum**: adverb; see note on *subter*, l. 1324. Notice the liquid *l* alliteration of the line.

1438. **perdocuere**. Aeschylus gives us a similar description of the gradual acquisition of the knowledge of the stars and seasons in *P. V.* 454 *ἦν δ' οὐδὲν αὐτοῖς οὔτε χείματος τέκμαρ οὔτ' ἀνθεμώδους ἦρος οὔτε καρπίμου θέρους βέβαιον, ἀλλ' ἄτερ γνώμης τὸ πᾶν ἔπρασσον, ἔστε δή σφιν ἀντολὰς ἐγὼ ἄστρων ἔδειξα τάς τε δυσκρίτους δύσεις*.

1439. **rem**, 'system' = *rerum naturam*.

1439. **ordine certo** : the knowledge that everything occurred in its proper order gave men a starting-point on which they might base their calculations about the seasons.

1441. **divisa discretaque** : pleonastic, ' portioned off and marked out by boundaries.'

1442. **florebat.** The Greeks used the same metaphor, Aesch. *Ag.* 659 *ὁρῶμεν ἀνθοῦν πέλαγος Αἰγαῖον νεκροῖς ἀνδρῶν Ἀχαιῶν ναυτικοῖς τ' ἐρειπίοις* : Eur. *Iph. Taur.* 300 *ὥσθ' αἱματηρὸν πέλαγος ἐξανθεῖν ἁλός*, ' was studded with.' In this passage the verb no doubt also contains an idea of the prosperity of the sea trade.

puppibus ; **urbes** is Munro's correction for *propter odores* in the MSS., a reading which makes no sense.

1443. Men began to realize that peace with their neighbours was preferable to war.

1444. **res gestas,** ' the deeds of men,' = *κλέα ἀνδρῶν*, ' songs of the feats of heroes, with which the history of most nations begins ' (Duff).

1445–8. Cf. ll. 324–31, where the argument is as follows : If there had been no beginning to the world, why does history begin only with the wars of Thebes and Troy ? How does it happen that the achievements of so many heroes are buried in silence ? Surely then either the world is young or its history and civilization have suffered frequent interruptions and occasional annihilation, only however to spring up again.

multo : ablative of difference as *hilo*, l. 1409.

elementa = the letters of the alphabet.

1447. **vestigia** : traces of ancient civilization, i. e. from prehistoric buildings or from figures drawn and scratched on rocks before writing was invented or partly from oral tradition that seems well founded and logical.

1448–9. Notice the asyndeton and cf. ll. 1336, 1372. In these two lines we have a list of the useful arts.

1450–1. Here follow the finer arts which are the true luxuries of life, **praemia.**

funditus, ' without exception.'

daedala, ' well-wrought,' used in a passive sense as in Verg. *Georg.* iv. 179 ' daedala fingere tecta '.

polire : substantival infinitive.

1452. **usus,** ' practice.'

1453. **pedetemptim progredientis** : as in l. 533 ' pedetemptim progredientis '.

1454. **unumquicquid** = *unumquidque*, ' each separate thing ' : so in Plaut. *Trin.* iv. 2. 39 ' unumquicquid percontabere '. For ll. 1454–5 see note on l. 1387.

protrahit in medium. Cf. l. 1158 ' protraxe in medium '.

1456. **alid** : for *aliud*, as in l. 1305 ' one after another,' i. e. one developed from another.

cordi' depends on *artibus*, ' by the inventions of their mind ' : *cor* is used of the intellect, which the Romans imagined was seated in the heart.

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